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XX (NISH)) N
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(SUZU/) SUZUKI Y.
(TANI/) TANIHARA M.
(KYOC ) KYOCERA CORP.
The present sequence represents an osteogenic peptide. The peptide
                                                                                                                                                                                                                                                    07-JUN-2000
                          Claim 2; Page 22; 22pp; English
                                                                                                                Nishimura Y,
                                                                                                                                                                                                    12-NOV-1998;
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TANIHARA M.
KYOCERA CORP.
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                                                                                                                Tanihara
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Osteogenic peptide; alkaline phosphatase; osteoblast; neogenetic bone; bone growth; bone fracture; rheumatoid arthritis; osteoporosis; peridontic disease; bone filler; bone substance.
Novel osteogenetic peptides useful for the treatment and fractures.
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15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
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07-SEP-1990;
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01-JUL-2002
06-JUN-1994
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                                                                                                                                                                                                                                                                                                                                                                                               Osteogenic protein; bone; cartil; vascularisation; mineralisation;
                                                                                                                                                                                                                                                                                                                                      30-NOV-1993.
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                             Claim
                                              New pure mammalian osteogenic proteins - induce endochondral bone formation when in association \boldsymbol{\theta}
                                                                            N-PSDB;
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                            69-72; 128pp; English
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900S-00610024.
900S-00616374.
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900S-00621988.
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910S-008170560.
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90US-00579865.
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This sequence is a fragment of the osteogenic designated OPS (The S is for "Short"). The 97

protein OP1 and is amino acid C-terminal

Nucleic acid encoding mammalian osteogenic ; to induce cartilage and bone formation when for repairing bone defects.

proteins in prepro fo n implanted in matrix,

form -

able

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WPI;

1999-131303/11

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RESULT 3
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18-OCT-1990;
21-OCV-1990;
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04-DEC-1990;
22-FEB-1991;
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20-AUG-1990;
07-SEP-1990;
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17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   region of OP1 which is the functional domain of OP1 is present in this fragment. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis.

(Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003)
                                                                                                                                                          Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAR-2003
24-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAY-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cartilage; craniofacial defect; skeletal disorder; de
non-union fracture; osteoarthritis; vascularisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW89696;
                                                                                                                                                                                                     (STYC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-AUG-1988;
                                                                                                                                                             RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       osteogenic protein; OP-1; OPX; endochondral bone formation; age; craniofacial defect; skeletal disorder; dental disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
                                                                                                                                                                                                       STRYKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     n 100.0%;
Similarity 100.0%;
20; Conservative (
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                                                                                                                                                          Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ã,
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(first en
                                                                                                                                                                                                                                                                        91US-00810560.
92US-00827052.
92US-00841646.
                                                                                                                                                                                                                                                                                                                                                                                                        90US-00599543.
90US-00600024.
90US-00616374.
                                                                                                                                                                                                                                                                                                                                                             90US-00621849.
90US-00621988.
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89US-00422699
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89US-00315342.
                                                                                                                                                                                                                                                  93US-00147023
                                                                                                                                                                                                                                                                                                                                          91US-00660162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90US-00569920.
                                                                                                                                                                                                       CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide;
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                                                                                                                                                             Kuberasampath
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Pred. No. 4.3e-07;
; Mismatches 0;
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                                                                                                                                                          Oppermann
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mineralisation;
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Claim 10; Col 151; 127pp; English

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RESULT 4
AAW95444
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes isolated DNA (I) encoding at least one osteogenically active region of human osteogenic protein-1 in prepro form (CQ (OP1-PP), murine OP1-PP) murine OP2-PP or human OP2-PP. Also described CC are: (A) DNA related to (I) encoding a polypeptide able to form dimers (that can induce cartilage and endochondral bone formation in a mammal CC when implanted in a matrix; (B) vectors containing (I) or related DNA; (CC) host cells transformed with this vector; (D) DNA (I') encoding a CC prepro- or pro-OP1, and related vectors and transformed cells; (E) costeogenic protein (II) produced by expression of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OP1 (CC) encodes hop1-PP; and (G) protein. Host cells of (C) are used to produce by truncating mature OP1 protein. Host cells of (C) are used to produce cofficted from mammalian cells following expression of the sequence that CC encodes hop1-PP; and (G) protein. Host cells of (C) are used to produce CC proteins able to induce cartilage and bone formation, e.g. for correction CC dental disorders; to heal non-union fractures; to repair cartilage, e.g. (C) in osteoarthritis, or generally wherever bone formation is required. The CC proteins induce complete development of endochondral bone, including CC present sequence represents a human OP1 fragment. (Updated on 20-MAR-2003 of the correct pa field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.
                                                                                                                                                                                                                                                                                                                                                                                                                       bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney diseauraemic medullary cystic disease; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW95444;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 97
                                Claim 3; Page 5-6; 67pp; English
                                                                                                                                                                                                                                               07-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cystic kidney disease; renal; therapeutic; osteogenic protein; OP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW95444 standard; protein;
                                                                                                                                       WPI; 1999-070084/06.
                                                                                                                                                                           Gjorstrup P,
                                                                                                                                                                                                                                                                                 06-MAY-1998;
                                                                                                                                                                                                                                                                                                                       12-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conserved 6 cysteine skeleton
                                                                                                                                                                                                               (BIOJ ) BIOGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PA field.)
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Pred. No. 4.3e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fragment from human OP1
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Length 97;

0

Gaps

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relates to

methods

for treating

cystic kidney diseases.

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RESULT 5
AAP95681
ID AAP9
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-APR-1988;
15-AUG-1988;
23-FEB-1989;
07-APR-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic agent is preferably a soluble or membrane bound polypeptide, e.g. a member of the osteogenic protein/bone morphogenic protein (OP/BMP) family within a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hOP1-PP, OP1-16Ser, OP3-16Heu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1, mOP1-PP, OP1-16Ser, OP3-PP, hOP2-PP, hOP2-PP, hOP2-PP, hOP2-PP, hOP2-PP, hOP2-PP, hOP2-PP, hOP2-PP, hOP3-PP, hOP3-P
The protein is capable of inducing endochronal bone formation in association with a biocompatible, in vivo biodegradable matrix. The protein is produced by expression of the recombinant DNA in a host cell and comprises more than one polygeptide chain, with an amino acid sequence sufficiently duplicative of COP5, COP16 or OP1. The protein and the implantable devices enable optimal predictable bone formation. Clinical applications include correction of acquired and congenital craniofacial and other skeletal or dental anomalies, induction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human osteogenic protein 1(OP1-1)
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21-AUG-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAP95681 standard; protein; 98 AA
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                                                                                                                                                                                                                     Claim 9; Page
                                                                                                                                                                                                                                                                                     Osteogenic devices comprising matrix contg. osteogenic proteins - prepd
                                                                                                                                                                                                                                                                                                                                                                                 Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO8909788-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 biodegradable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Osteogenic device; osteogenic protein;
                                                                                                                                                                                                                                                                 by recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first en
                                                                                                                                                                                                                  48; 69pp; English
                                                                                                                                                                                                                                                                                                                                                                                   Kuberasamp T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88US-00179406.
88US-00232630.
89US-00315342.
89WO-US001469.
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                                                                                                                                                                                                                                                                 techniques
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Pred. No. 4.3e-07;
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RESULT 6
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Best Local (
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                              08-APR-1988;
15-AUG-1988;
23-FEB-1989;
07-APR-1989;
                                                                       The protein is capable of inducing endochronal bone formation in association with a biocompatible, in vivo biodegradable matrix. The protein is produced by expression of the recombinant DNA in a host cell and comprises more than one polypeptide chain, with an amino acid sequence sufficiently duplicative of COP5, COP7, COP16 or OP1. The protein and the implantable devices enable optimal predictable bone formation. Clinical applications include correction of acquired and congenital craniofacial and other skeletal or dental anomalies, induction of local endochondral bone formation in non-union fractures, peridontal applicns. requiring bone formation and cartilage repair, eg in the treatment of osteoarthritis. See also AAP95679-P95692 and AAN95097. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                            Osteogenic devices comprising matrix contg. osteogenic by recombinant techniques.
                                                                                                                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osteogenic device; osteogenic protein; endochronal bone; biodegradable matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of local endochondral bone formation in non-union fractures, peridonta applics. requiring bone formation and cartilege repair, eg in the treatment of osteoarthritis. See also App95679-p95692 and AAN95097. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003)
                                     Sequence 102
                                                                                                                                                                                                                                                 Claim 10; Page 49; 69pp; English.
                                                                                                                                                                                                                                                                                                                                          Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO8909788-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                      (CREA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
21-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAP95682;
                                                                                                                                                                                                                                                                                                                    1989-324203/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                     CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d on 25-MAR-2003 to PA field.)
                                                                l on 25-MAR-2003 to PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                            Ħ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
                                                                                                                                                                                                                                                                                                                                            Kuberasamp
                                                                                                                                                                                                                                                                                                                                                                                              88US-00179406.
88US-00232630.
89US-00315342.
89WO-US001469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                88US-00179406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein 1(OP1-II) for osteogenic device
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
100.0%;
                                                                                                                                                                                                                                                                                                                                          'n,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       102
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                                                                                                                                                                                                                                                                                                                                            Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 1;
Pred. No. 4.4e-07;
                                                                                                                                                                                                                                                                                                                                                                      INC.
Score 111; DB 1;
Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
            Length 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fractures, p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
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01-JUL-2002
06-JUN-1994
                   This sequence is a fragment of the osteogenic protein OP1 and is designated OP7. The sequence is a 102 C-terminal region and functional domain of OP1. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation shope marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteograthritis.

(Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                 New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix
                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5266683-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Osteogenic prote vascularisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Osteogenic protein OP7.
                                                                                                                              Claim
                                                                                                                                                                                              WPI;
                                                                                                                                                                                                                                                                                                                                             20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                           08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR53360;
                                                                                                                                                                                                               Kuberasampath
                                                                                                                                                                                                                                                                                          04-DEC-1990;
                                                                                                                                                                                                                                                                                                               21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                  23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                            21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR53360 standard; protein; 102 AA
                                                                                                                                                                                                                                     (STYC)
                                                                                                                                                                                                                                                                               22-FEB-1991
                                                                                                                                                                                                                                                                                                                           18-OCT-1990
                                                                                                                                                                                                                                                                                                                                    .8-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                            1993-395405/49.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; bone; cartil
ation; mineralisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(revised)
(first entry)
                                                                                                                            69-72; 128pp; English.
                                                                                                                                                                                                                Ļ
                                                                                                                                                                                                                                                          91US-00660162.
91US-00810560.
92US-00827052.
                                                                                                                                                                                                                                                                                       90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
                                                                                                                                                                                                                                                                                                                                             90US-00569920
90US-00579865
                                                                                                                                                                                                                                                                                                                                                                              89US-00422699
                                                                                                                                                                                                                                                                                                                                                                                                                                            92US-00841646
                                                                                                                                                                                                                 Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                    -00483913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cartilage; matrix; osteoarthritis; repair;
sation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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                                                                                                                                                                                                                 Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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                                                               mineralisation and
                      on 25-MAR-2003
R field.)
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                                                                                    a matrix
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Query Match Best Local Similarity

100.0%;

Score Pred.

111; No. 4

DB 2;

Length

Sequence 102

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The present sequence represents a mutant human osteogenic protein-1 (hOP-1). OP-1 proteins are a group of morphogenically active proteins. Morphogens are inactive when reduced, but are active as oxidised homodimers and when oxidised with other morphogens. Morphogenic proteins such as OP-1 play an important role, not only in embryogenesis, but also in tissue and organ maintenance and repair in mammals. They induce a developmental cascade of tissue-specific morphogenesis in a mammal. This mutant has had Ala63 replaced with Ser to enhance the solubility of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human osteogenic protein-1; hOP-1; morphogen; morphogeni tissue-specific morphogenesis; 3-D structure; morphogenic anal therapeutic agent; diseased tissue regeneration; osteoporosis; bone-remodelling disease.
                                                                                                                        Computer system containing crystallographic coordinates of human osteogenic protein-1 - used for design of analogues with agonist activity, potentially useful for treating osteoporosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                     Disclosure;
                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                         Disulfide-bond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW36897 standard; protein; 102
                                                                                                                                                                      WPI; 1997-385296/35
                                                                                                                                                                                          Keck P,
                                                                                                                                                                                                                                                                       22-JAN-1997;
                                                                                                                                                                                                                                                                                             24-JUL-1997.
                                                                                                                                                                                                                                                                                                                   WO9726277-A2
                                                                                                                                                                                                                                                                                                                                                                        Region
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                                                                                                                                                                                                                            (CREA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                            Griffith DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                     Page; 176pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           osteogenic protein 1 with enhanced solubility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                  96US-00589552
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67. .99
                                                                                                                                                                                                                                                                                                                                                                                 protein"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein"
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                                                                                                                                                                                                                                                                                                                                                                                                /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        note= "region designated Finger 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note= "corresponds to
                                                                                                                                                                                                                                                                                                                                                                                                                                                   note= "wild
                                                                                                                                                                                                                                                                                                                                                                                                                               note= "corresponds
                                                                                                                                                                                                                                                                                                                                                                                                                                           . 99
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                                                                                                                                                                                                                                                                                                                                                            "region designated
                                                                                                                                                                                                                                                                                                                                          "region designated Finger
                                                                                                                                                                                             Carlson
                                                                                                                                                                                                                                                                                                                                                                                              "corresponds to
                                                                                                     English.
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                                                                                                                                                                                            Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          residues 38
                                                                                                                                                                                                                                                                                                                                                                                              residues
                                                                                                                                                                                                                                                                                                                                                                                                                                residues 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ß.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      morphogen; morphogenic protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    replaced with Ser"
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                                                                                                                                                                                                                                                                                                                                                                                                138
                                                                                                                                                                                                                                                                                                                                                                                                                                136 of
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RESULT 9
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ភិទ្ធិកំពុក្ខភិទ្ធិកំពុក្ខភិទ្ធិនុំ
Query Match
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Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Typical applications of the therapeutic agents identified are in proliferation of progenitor cells and regeneration of damaged or diseased tissue (e.g. osteoporosis or other bone-remodelling diseases) but more generally in any situation where mimicking or agonism of hOP-1 is required, note; this sequence does not appear in the specification; it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human osteogenic protein-1; hOP-1; OP-1; morphogen; morphogenic protein; tissue-specific morphogenesis; 3-D structure; morphogenic analogue; therapeutic agent; diseased tissue regeneration; osteoporosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    novel computer system. The system comprises a memory containing atomic X-ray crystallographic coordinates defining at least part of hOP-1, and a processor able to generate a molecular model having the three-dimensional shape representative of at least part of hOP-1. Morphogenic analogues with hOP-1 like activity can also be identified using this system. Typical applications of the therapeutic agents identified are in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                                     Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     therapeutic agent; disease bone-remodelling disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human osteogenic protein 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW36889;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW36889 standard; protein; 102
                    WPI; 1997-385296/35
                                                                                                                                                                                                                                                                                    24-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             required. note: this sequence does not was created using information provided
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          homodimer. Ala63 was identidied as a potential mutation site using
                                                                 Keck P,
                                                                                                                                                                                      22-JAN-1996;
                                                                                                                                                                                                                                      22-JAN-1997;
                                                                                                                                                                                                                                                                                                                               WO9726277-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
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                                                                                                               CREATIVE BIOMOLECULES UNIV BRANDEIS.
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                                                                 Griffith DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein"
34. .101
                                                                                                                                                                                        96US-00589552
                                                                                                                                                                                                                                      97WO-US001071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "corresponds to protein"
                                                                                                                                                                                                                                                                                                                                                                                    /note=
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                                                                                                                                                                                                                                                                                                                                                                               "region
                                                                                                                                                                                                                                                                                                                                                                                                                               "region
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                                                                      Carlson WD,
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Pred. No. 4.5e-07;
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                                                                      Rueger
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                                                                      Sampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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RESULT 10
AAW36872
ID AAW4
XX AAW4
XX AAW4
XX 10-1
DT 10-1
XX Huma
XX 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is defined as human osteogenic protein-1 1(hOP-1) in the specification. OP-1 proteins are a group of morphogenscally active proteins. Morphogens are inactive when reduced, but are active as coxidised homodimers and when oxidised with other morphogens. Morphogenic proteins such as OP-1 play an important role, not only in embryogenesis, that also in tissue and organ maintenance and repair in mammals. They computer system used to define potential therapeutic agents. They computer system used to define potential therapeutic agents. The system computer system used to define potential therapeutic agents. The system of the containing atomic x-ray crystallographic coordinates of molecular model having the three-dimensional shape representative of at least part of hOP-1, and a processor able to generate a complete part of hOP-1, and a processor able to generate a molecular model having the three-dimensional shape representative of at least part of hOP-1. Morphogenic analogues with hOP-1 like activity can also be identified with graph three-dimensional shape representative of at calso be identified and the processor and the system. The analogues dentified have, compared with native OP-1, better stability and/or solubility under physiological conditions, improved tissue target specificity, and reduced clearance rates. Typical applications of the therapeutic agents densease) but more generally in any situation where mimicking or agonism of hOP-1 is required
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                 11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic protein; OP; OP-1; morphogen; morphogenic prote embryogenesis; organ maintenance; tissue-specific morphogenesis; arthritis; emphysema; osteoporosis; cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Computer system containing crystallographic coordinates of human osteogenic protein-1 - used for design of analogues with agonist activity, potentially useful for treating osteoporosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW36872
      WPI; 1997-384665/35
                                                                  Ozkaynak E,
Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                               20-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                              22-JUL-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 72; 176pp; English
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                                                                                                                                                           CREATIVE BIOMOLECULES INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS
                                                                  Oppermann
Smart JE;
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                                                                                                                                                                                                                       91US-00667274.
91US-00752764.
91US-00752861.
92US-00938021.
                                                                                                                                                                                                                                                                                                                                                                                  94US-00278729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein 1 from which a consensus sequence is derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 2;
100.0%; Pred. No. 4.5e-07;
tive 0; Mismatches 0;
                                                                                                   Ή
                                                                                               Pang RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          76
                                                                                                   Cohen CM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               morphogenic protein;
                                                                                                      Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 102;
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Screening for compounds which modulate morphogen expression - by incubating in the presence of epithelial cells which contain a cellular gene for morphogenic protein expression.
                                                                                                                                                                          N-PSDB; AAT97877
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Claim
2; Page; 49pp; English
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compounds which can be used in the treatment of the soporasis of the liver of the soporasis of the liver, emphysems, cardiomyopathy, and compounds in the specific morphogenesis in a mammal. A novel method is described for screening a candidate compound for the ability to modulate expression of a cellular gene encoding a naturally occurring morphogenic protein.

CC The candidate compound is incubated with epithelial cells which express the cellular gene, and after a period of time the epithelial cells which express the cellular gene. A change in the level of the morphogenic protein relative to the level in the epithelial cells which express compound is indicative of the ability of the compound to modulate

CC compounds which can increase or decrease morphogen production or levels. Such compounds can be used in the treatment of e.g. arthritis, emphysema, of the liver note: the present sequence does not appear in the specification. It was created using information provided. (Updated on the content of the specification.) The present sequence represents a part of a human osteogenic protein-1 (hOp-1). hOp-1 was first found in bone tissue, and is now known to be produced at relatively high levels in cells derived from renal or adrenal tissue. Op-1 proteins are a group of morphogenically active proteins. Morphogens are inactive when reduced, but are active as oxidised homodimers and when oxidised with other morphogens (e.g. AM33684-62). Comparison of the amino acid sequences of human and mouse Op-1 and Op-2 proteins has resulted in a consensus sequence, of which the present

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                            Query Match
Best Local S
Matches 20
                                                                                 Sequence 102 AA;
                               20;
                                            Similarity
INPETVPKPCCAPTQLNAIS 20
                            100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 4.5e-07; Conservative 0; Mismatches 0;
                                                       Length 102;
                               Indels
                               0
                              Gaps
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0

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RESULT 11
AAY16708
AAY16708 standard;
                                          AAY16708
                                              peptide; 102
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17-AUG-1999

(first

entry

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INPETVPKPCCAPTQLNAIS 76

Growth factor; GF; persephin; neuron growth; cellular degeneration; peripheral neuropathy; amyotrophic lateral sclerosis; ischemic strok Alzheimer's disease; Parkinson's disease; Huntington's disease; trau brain injury; spinal cord injury; nervous system tumour; infection; multiple sclerosis; cardiac muscle degeneration; injury; neurotoxin; metabolic disease; diabetes; renal dysfunction; neurturin. 16-SEP-1997; 15-SEP-1998; 25-MAR-1999 Unidentified WO9914235 Seq IJ 98WO-US019163. No: 161 trauma;

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RESULT 12
AAW89697
ID AAW89697
XX AAW89697
XX AAW89697
XX 20-M2
DT 20-M2
DT 24-M2
XX Humar
XX Humar
XX Humar
XX Homo
X
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel isolated and purified growth factor (GF) CC that comprises persephin or a fragment or a conservatively substituted CC variant. The persephin GF polypeptides can promote the survival and CC growth of neurons and non-neuronal cells. The persephin GF polypeptides CC or polynuclectides can be used for preventing or treating cellular CC or polynuclectides can be used for preventing or treating cellular CC degeneration or insufficiency, e.g. neuronal degeneration resulting from CC desase, Parkinson's disease, Huntington's disease, ischemic stroke, CC acute brain injury, acute spinal cord injury, nervous system tumours, CC multiple sclerosis, or infection, hematopoietic cell degeneration or CC insufficiency resulting from eosinopenia, anemias, thrombocycopenia, or CC stem-cell insufficiences, cardiac muscle degeneration or injury, exposure to the used for treating e.g. peripheral nerve trauma or injury, exposure to CC neurotoxins, metabolic diseases such as diabetes or remai dysfunctions CC and damage caused by infectious agents. The GF can also be used for CC promoting the growth and/or differentiation of a cell in a culture condition mediated by expression of persephin by a population of cells. The products can also be used for detection and diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 20
08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                              Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAR-2003
24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW89697;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic protein OP-1 fragment 330-431.
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                                                                                                                                             23-MAY-1995;
                                                                                                                                                                                                      26-JAN-1999.
                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW89697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neuronal growth.
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                                                                                                                                                                                                                                                                                                                                                                         marrow differentiation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; peptide; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS
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(first entry)
88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 2;
Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
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The present invention describes isolated DNA (I) encoding at least one osteogenically active region of human osteogenic protein-1 in prepro form (C(DPI-PP), murine OPI-PP, murine OPI-PP) and the described care: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal country (B) westers containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a prepro- or pro-OPI, and related vectors and transformed cells; (E) corteogenic protein (II) produced by expression of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OPI corted from mammalian cells following expression of the sequence that cenceds hopi-pp; and (G) production of an active osteogenic composition by truncating mature OPI protein. Host cells of (C) are used to produce proteins able to induce cartilage and bone formation, e.g. for correction of acquired or congenital craniofacial defects or other skeletal or congenital disorders; to heal non-union fractures; to repair cartilage, e.g. in osteogenthitis, or generally wherever bone formation is required. The proteins induce complete development of endochondral bone, including vascularisation, mineralisation and bone marrow differentiation. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-AUG-1990
07-SEP-1990
18-OCT-1990
18-OCT-1990
21-NOV-1990
04-DEC-1990
04-DEC-1990
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20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
Sequence
                                  present sequence represents to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid encoding mammalian osteogenic proteins in prepro form - ab to induce cartilage and bone formation when implanted in matrix, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-131303/11.
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22-FEB-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                              repairing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RHL,
102 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                 Co1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                             151; 127pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                              bone defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
91US-00660162.
91US-00810560.
92US-00810560.
92US-00810560.
92US-00810560.
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90US-00483913.
90US-00569920.
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                                                                                                                                                                                                                                                                                                                                                                                                           English.
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                                   Query Match
Best Local S
Matches 20
57
                 -ب
                                    20;
                                n 100.0%;
Similarity 100.0%;
20; Conservative (
                INPETVPKPCCAPTQLNAIS
INPETVPKPCCAPTQLNAIS
                                    0
                                   Score 111; DB 2;
Pred. No. 4.5e-07;
Mismatches 0;
 76
                  20
                                                      Length 102;
                                      Indels
                                      0
                                      Gaps
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AAW95443
ID AAW95443;
XX AAW95443;
XX Conserved 7 cysteine skeleton fragment from human OP1.
XX Cystic kidney disease; renal; therapeutic; osteogenic protein; OP, XX DE Conserved 7 cysteine skeleton fragment from human OP1.
XX DE Conserved 7 cysteine skeleton fragment from human OP1.
XX DE Conserved 7 cysteine skeleton fragment from human OP1.
XX DE Conserved 7 cysteine skeleton fragment from human OP1.
XX Cystic kidney disease; renal; therapeutic; osteogenic protein; OP, XX Cystic kidney disease; multicystic dysplastic kidney disease;
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ARESULT 14
AAY92569
ID AAY9256
AC AAY92
AC AAY92
XX 10-AL
DT 10-AL
XX fings
KW fings
KW fusi
XX fusi
CS Homo
XX FT Regii
FT Regii
FT Domai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to methods for treating cystic kidney diseases. The CC method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic capent is preferably a soluble or membrane bound polypeptide, e.g. a member of the osteogenic protein/bone morphogenic protein (OP/BMP) family contains a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hop1-pp, Op1-18Ser, OP7, OP1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1-pp, OP7, hop2-pp, hop2-pr, ho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                          finger fusion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gjorstrup P,
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                                                                                                                                                                                                                                                                                                                                                                OP-1 finger-1-heel-finger-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY92569 standard;
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      Domain
                                                         Region
                                                                                                                         Domain
                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           active region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57
                                                                                                                                                                                                                                                                      domain; heel region; BMP; TGF-beta family; protein refolding; protein; osteopathic; antibacterial; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 2; llarity 100.0%; Pred. No. 4.5e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA;
                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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2. .29
/label= finger_1
35. .65
/label= heel
68. .98
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                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102
                                                                                                                                                                                                                                                                                                                                                                sequence.
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RESULT 15
AAB09534
ID AAB09534
C AAB09
XX AB09
XX AB09
XX AB09
XX TGP-1
KW TGP-1
KW Drock
KW 
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Best Local
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16-AUG-1999;
      WO200020607-A2
                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                    11-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-OCT-1999;
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                                                                                                                                                      inhibin;
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AAY92554-82 show the finger 1, heel and finger 2 domains of TGF-beta superfamily members. These sequences can be used to form novel fusion proteins. Novel proteins commrise biologically active TGF-beta family conditions. The fusion proteins comprises: (1) a TGF-beta family protein conditions. The fusion proteins comprises: (1) a TGF-beta family protein CC -terminal seven cysteine domain, comprising finger 1, finger 2 and heel subdomains; and (2) a heterologous leader sequence domain operatively linked to the C-terminal domain. Truncations, heterodimers and mutants of these fusion proteins and methods of purifying the heterodimers are also CC laimed. The TGF-beta family proteins can be used to induce the full cascade of morphogenic events which culminate in skeletal tissue formation, including cartilage and endochronal bone formation. They are constained in the binding of fibrin and fibronectin to the implanted matrix. C chemotaxis of cells, proliferation of fibroblasts, differentiation into C chondroblasts, cartilage formation, vascular invasion, bone formation, cartivity, including altered receptor binding and improved biological activity, including altered receptor binding and improved targeting
                                                                                                                                                                                                                                                                   Human OP-1 C-terminal fragment,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A biologically active TGF-beta family member fusion protein competent to refold, comprising a C-terminal linked TGF-beta family protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB09534 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 145-146; 160pp; English
                                                                developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; osteogenic protein; OP; bone morphogenetic protein; BMP; growth/differentiation factor; GDP;
connective tissue; cartilage; vulnerary.
                                                                                                                                                 TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000-303743/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 INPETVPKPCCAPTOLNAIS 20
                                        tissue morphogenesis; regeneration; bone; dental tissue;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tai M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0103418P.
99US-00375333.
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Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                   SEQ ID NO:55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4
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RESULT 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid contential residues elected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, and a c-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CG Ly, Asg) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include groteins such as the osteogenic proteins (Ops), bone morphogenetic proteins (BNPs), growth/differentiation factors (GDPs) and inhibins. CC invention are the finger 2 subdomain mutants of human osteogenic proteins (TGF-beta superfamily mutants encompassed by the civention are the finger 2 subdomain mutants of human osteogenic proteins. CC invention are the finger 2 subdomain mutants of human osteogenic proteins can be used in conjunction with a bicocompatible matrix e.g., CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, CC arttilage and/or other mineralised skeletal or connective tissue e.g., CC ligament, tendon, muscle, fibrocartilage, joint capsule and corresponse mediated tissue damage and scar tissue or carboxymethylcellulose for regenerating bone, CC intervertebral discs. The Op-1 mutants can be used to repair diseased or immune/inflammatory response mediated tissue damage and scar tissue or carboxymethylcellulose for repair diseased or commenciative tissue and no prevent or substantially inhibit commune/inflammatory response mediated to the wild-type TGF-beta composition and proved in vitro refolding constitutes in a pH range of 6-9, increased solubility in aqueous solution can improved stability and/or activity. Sequences Alabossi-posite and constitute. Sequences Alabossi-posite and constitute tissue beta constitute tissue superfamily proteins referred to in the specificatio
                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 20
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16-AUG-1999;
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  Tumour growth factor beta; TGF-beta; morphogenic protein; BMP; OP;
bone morphogenic protein; osteogenic protein; mutant; modified;
                                                                                                          22-AUG-2000
                                                                                                                                                  AAB02800;
                                                                                                                                                                                        AAB02800 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 147-148; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-303787/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (STYC ) STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sue and connective tissue and comprises a substitution finger 2 domain.
                                                                                                                                                                                                                                                                                                  57
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                                                                                                                                                                                                                                                                                                                                                                                Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                INPETVEKECCAPTOLNAIS 76
                                                                  amino
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΑA;
                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0103418P.
99US-00374958.
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                                                                acid
protein; osteogenic
                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 3;
100.0%; Pred. No. 4.5e-07;
tive 0; Mismatches 0;
                                                              sequence
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                                                                  SEQ
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                                                                  NO:55
                                                                                                                                                                                                                                                                                                                                                                                                                        Length 102;
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RESULT 17
AAU10599
ID AAU10
В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a tumour growth factor beta (TGF-beta)
CC superfamily chimeric protein (I) derived from at least 2 different
CC members of the superfamily comprising a dimer with one monomer that
CC contains a finger 2 domain derived from a first family member and a
CC finger 1 domain and heel domain, both derived from a second family
CC member. The monomer further comprises a conserved C-terminal cysteine
CC skeleton. (I) has osteogenic, proliferative and antiinflammatory
CC activities. The TGF-beta superfamily chimeric proteins (I) are useful for
CC inducing tissue morphogenesis (i.e. molecules capable of tissue repair
CC and regeneration and/or inhibiting inflammation) in bone, non-mineralised
CC skeletal tissue, dental tissue, connective tissue, brain, liver and nerve
CC and for inducing the proliferation and differentiation of uncommitted
CC and for inducing the proliferation and differentiation of uncommitted
CC progenitor cells in a tissue-specific manner to support new tissue
CC sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 20
                                                                                       Human; osteogenic protein 1; hOP-1; OP-1; finger region; heel region; morphogen; metabolic bone disease; osteopenia; bone; fracture; protein coordinate data.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one monomer containing domains from two family members.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  finger 2 sub-domain; finger 1 domain; heel domain; chimeric protein; osteogenic; proliferative; antiinflammatory; tissue morphogenesis; tissue repair; regeneration; proliferation; differentiation.
                                                                                                                                                        Human
                                                                                                                                                                                                                                                   AAU10599 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-OCT-1998;
16-AUG-1999;
                                                         Homo sapiens
                                                                                                                                                                                      12-MAR-2002
                                                                                                                                                                                                                      AAU10599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (STYC ) STRYKER CORP
                                                                                                                                                      osteogenic
                                                                                                                                                                                                                                                                                                                                   57 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                               H
                                                                                                                                                                                                                                                                                                                                                                                                l Similarity 100
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 134-135;
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X
                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0103418P
99US-00374936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US023370
                           Location/Qualifiers
                                                                                                                                                      protein 1
                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    149pp; English.
                                                                                                                                                         (hop-1).
                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 3;
Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                                                                                   76
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                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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/note= "Finger 1 region"

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RESULT 18
ABB76281
ID ABB76
XX OStec
XX OStec
XX OStec
XX Acy
FH Homo
XX Key
FH Disul
FT Regic
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a memory storing an atomic X-ray crystallographic coordinate, which defines a portion of human osteogenic protein-1 (hOP-1) of the finger or heel region. A processor, generates a molecular model having a three dimensional shape of the portion of human OP-1. This is used for designing, identifying and producing morphogen analogues of hOP-1, for treating mammals with metabolic bone disease such as osteopenia, or for generating morphogen based therapeutics for treating injured or diseased mammalian tissue, such as bone during fracture. This sequence represents human OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Computer system for producing morphogen analogs, has processor to generate molecular model having three dimensional shape of portion human osteogenic protein from the finger or heel region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Keck
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 102
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                                                                     Region
                                                                                                                Region
                                                                                                                                         Disulfide-bond
Disulfide-bond
                                                                                                                                                                                                                                     Disulfide-bond
                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                           Mature human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB76281 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CREA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-JAN-1997;
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  US2002028453-A1
                                                                                                                                                                                                              Region
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20; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Griffith DL,
                                                                                                                                                                                                                                                                                                                                                                              protein-1; OP-1; hOP-1; human; morphogen; vulnerary;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fig 12; 127pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,
                                                                                                                                                                                                                                                                                                                                                                                                                           osteogenic protein-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                  /label= Finger-1
30. .99
34. .101
35. .67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00589552
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                                            /label= Heel
68. .102
/label= Finge
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                                                                                                                                                                                                                                                           Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carlson WD,
                                               Finger-2
                                                                                                                                                                                                                                                                                                                                                     co-ordinate data; cyclic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 111; DB 4;
Pred. No. 4.5e-07;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sampath KT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 102;
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  ADG14142
ID ADG14
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AC ADG14
AC ADG14
AX 26-FE
XX Human
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XW Cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is the protein sequence of human mature osteogenic protein-1 (hop-1), including the finger-1, heel and finger-2 regions. The CC present invention is based on the X-ray crystallographic determination of CC the 3-dimensional structure of mature, dimeric hOp-1. The 3-dimensional CC structure of hOp-1 has been resolved to 2.3 Angstroms. 2 Sets of atomic X C-ray crystallographic co-ordinates for hOp-1 are provided, the first CC defining an hOp-1 structure resolved to a resolution of 2.8 Angstroms and CC the other to a resolution of 2.3 Angstroms. These sets of atomic co-crdinates can be used in the computer aided design of protein or peptide CC analogues of Op-1, or to identify or design small organic molecules that functionally mimic Op-1. The engineering of hOp-1 dimers to improve stability, enhance water solubility, or to add or remove glycosylation CC sites, is envisaged. A compound that modulates Op-1 activity is useful CO repairing diseased or damaged mammalian tissue, and for preventing or inhibiting immune/inflammatory response-mediated tissue damage or scar cross the contraction following injury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Producing morphogenic analog having osteogenic protein-1 like biological activity useful for therapeutic purposes, involves use of a portion of atomic co-ordinates defining three-dimensional structure of the protein.
                                                                                                                                                                                          Human; osteogenic protein-1; OP-1; transforming growth factor TGFbeta; bone morphogenic protein; BMP5; BMP6; BMP2; BMP4; BM Growth Differentiation Factor; GDF5; GDF6; GDF7; cell growth;
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                             02-OCT-2003
                                                                          US2003185792-A1
                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                       Human osteogenic
                                                                                                                                                                                                                                                                                                                                      26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 102 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KECK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-JAN-1996;
22-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-FEB-2001; 2001US-00791946.
                                                                                                                                                                                                                                                                                                                                                                                                                                ADG14142 standard;
                                                                                                                                                                       differentiation; cell proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-414103/44.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) KECK P C.
) GRIFFITH D L.
) CARLSON W D.
) RUEGER D C.
) SAMPATH K T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Griffith DL,
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larity 100.0%;
Conservative 0,
                                                                                                                                                                                                                                                                                                                                      (first
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97US-00786284
                                                                                                                                                                                                                                                                                       protein,
                                                                                                                                                                                                                                                                                                                                                                                                                             protein;
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                                                                                                                                                                                                                                                                                         OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                102
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Pred. No. 4.5e-07;
; Mismatches 0;
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С,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 102;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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ADO36196
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cc peptide comprising a peptide sequence having 6-50 amino acid residues based on or chosen from the finger 1, heel or finger 2 regions of the Crorpheta (transforming growth factor beta) family proteins osteogenic CC protein-1 (Op-1), BMP5, BMP6, BMP2, BMP4, BMP8/OP2, GDF5 (Growth CC Differentiation Factor), GDF6 and GDF7. Also included are a peptide that CC brings together a type (I) and Type (II) receptor (comprising a first CC three contiguous amino acids of the protein regions detailed above and a second peptide sequence having a cysteine residue on each end and including at least CC second peptide sequences given in the specifications), a nucleic configuration acid sequences given in the specifications), a nucleic configuration at serile excipient and the above peptide, a pharmaceutical preparation CC comprising a sterile excipient and the above peptide, a peptidomimetic of the peptide and inhibiting or promoting growth, differentiation, or compliferation of a cell by contacting the cell with the above peptide. The antagonist peptides are used to antagonise bone morphogenic protein. Such as osteogenic protein-1 activity. The contacting protein-1 continued in the protein such as osteogenic protein-1 effects of a morphogenic protein, such as osteogenic protein-1 (OP-1). The present of the contaction of the protein used to design the peptides of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
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06-JUN-2001;
05-FEB-2002;
                                                                                                                            memory stores atomic X-ray crystallographic coordinate; human; transformation and differentiation factor-1; TDF-1; morphogen analogue production; tissue morphogenic protein; tissue morphogenic protei mimetic; solubility; stability;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bone morphogenic protein antagonist peptide comprises peptide sequence having specified amino acid residues including contiguous amino acids of specific amino acid sequences given in the specifications.
                                                                                                 protein
                                                                                                                                                                                                                                                                                         Transformation
                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                      ADO36196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 4; 88pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-031977/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADO36196 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a bone morphogenic protein (BMP) antagonist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-JAN-1996;
22-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-JUN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
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                                                                                                    co-ordinate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVEKECCAFTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bosukonda D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-00791946.
2001US-0296291P.
2002US-0354820P.
2002US-0371298P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002US-00164279
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97US-00786284.
                                                                                                                                                                                                                                                                                         differentiation factor-1 fragment #1.
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Pred. No. 4.5e-07;
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RESULT 21
AAY92027
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Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     coordinates defining a portion of human transformation and differentiation factor-1 (hTDF-1). A processor communicates with the memory to generate a molecular model having a three-dimensional shape representing portion of hTDF-1. Also described is a morphogen analogue production method. The system is useful for designing, identifying and producing molecules which act as functional minetics of tissue morphogenic protein, TDF-1. The molecule is designed with enhanced solubility and stability under physiological condition. Also the biological activity of the hTDF-1 in mammal is enhanced. This is the biological activity of the hTDF-1 in mammal is enhanced. This is the biological activity of the hTDF-1 comprising the finger-1, heel and finger 2 regions, used in a comparison with another tissue morphogen protein, transforming growth factor beta 2 (TGF-beta2).
                Misc-difference
                                                                                                                                                                                                                         human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                                                      19-JUL-2000
                                                                                                                                                                                                                                                                                                                   AAY92027;
                                                                                                                                                                                                                                                                                                                                                AAY92027 standard; protein; 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Computer system for producing tissue morphogenic protein analogs, has memory to store atomic X-ray crystallographic coordinates defining portion of human transformation and differentiation factor-1 (hTDF-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 3; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-439217/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-NOV-2002; 2002US-00290554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-NOV-2002; 2002US-00290554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2004093164-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CARL/) CARLSON W D. (KECK/) KECK P C.
                                                                                                                                                                                                           bone morphogenic protein-6; mutant; cystine knot growth
                                                                                                                                                                                                                                                                                                                                                                                                                           57
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               102
                                                                                                                                                                                                                                                        morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA;
                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          describes memory stores atomic X-ray crystallographic
              /label= beta_hairpin_loop_1
/note= "mutant optionally compri
substitutions in these residues"
41. 80
                                                                                                                                                 Location/Qualifiers
                                                                                      receptor"
                                                                                                    /note= "optionally mutated to increase electrostatic
interaction between beta hairpin structure and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
"optionally mutated to increase electrostatic
                                                                                                                                                                                                                                                        protein-7,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 8;
Pred. No. 4.5e-07
                                                                                                                                                                                                                                                                                                                                                                                                                           76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
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                                                                                                                                                                                                           BMP-6; osteogenic protein-1 factor; factor; hairpin loop; infertility.
                                                                                                                                                                                                                                                        osteogenic protein-1 factor monomer
                                            comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 102;
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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                          bioactivity. Mutant cystine knot growth factor (CKGF) proteins comprising one or more mutant subunits and having novel properties or improved pharmacological properties, compared to wild type CKGFs, are claimed. The CKGF superfamily comprises at least four families of growth factors: the glycoprotein hormones, the platelet-derived growth factor (PDGF) family, the neurotrophins and the transforming growth factor-beta family; the families are known to be structurally similar (especially comprising the cystines in the CKGF haripin loops of family members and other members of the CKGF superfamily could significantly alter the biological activities of the CKGF. Mutant transforming growth factor family proteins or analogues are useful for treatment of ovulatory dysfunction, luteal phase defect, unexplained infertility, time-limited conception and in
                                                              25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New mutant cystine knot growth factor mutant subunits, useful for treating hypothyroidism and thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                               Sequence 111
                                                                                                                                                                                                                                                                                                                                                                                                                assisted reproduction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                altering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 447; Page 309; 320pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Weintraub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Domain
 Osteogenic
                                 N-terminally
                                                                                                                                                                AAR53361 standard; protein; 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This is wild type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYMA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-283585/24
                                                                                                                                                                                                                                                   67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              s wild type human bone morphogenic protein-7 (osteogenic protein-1 monomer); Mutants comprise at least one electrostatic charge monomer); Mutants comprise at least one electrostatic charge ng mutation in a beta hairpin loop, resulting in increased ivity. Mutant cystine knot growth factor (CKGF) proteins comprising
                                                                                                                                                                                                                                                                                -
                                                                                                                                                                                                                                                                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                 INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD
protein;
                                                                                                                                                                                                                                                                                                                 Conservative
                                                              (revised)
(revised)
(first en
                                                                                                                                                                                                                                                                                                                                                                                AA;
                                  truncated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Szkudlinski MW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US019772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= beta_hairpin_loop_3
/note= "mutant optionally comprises
substitutions in these residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              interaction between beta hairpin structure receptor" \hfill \hfill 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "optionally mutated to increase electrostatic
interaction between beta hairpin structure and a
 bone; cartilage;
                                                                entry)
                                                                                                                                                                                                                                                                                                                              100.0%;
                             osteogenic protein OP1
                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                              Score 111; DB 3;
Pred. No. 4.9e-07;
Mismatches 0;
                                                                                                                                                                                                                                               86
                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              factor proteins comprising one eating or preventing diseases e
 matrix; osteoarthritis; repair;
                                  (OP1-16Val)
                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  one
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                                                                                                                                                                                                                 RESULT
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Matches 20
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07-SEP-1990;
18-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-APR-1988;
15-AUG-1988;
23-FEB-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-16Val. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US5266683-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vascularisation; mineralisation;
   Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OPI; truncated.
                                                                                   N-terminally
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New pure mammalian osteogenic proteins - induce endochondral bone formation when in association
                                                                                                                     26-MAR-1999
                                                                                                                                                  AAW95454;
                                                                                                                                                                                  AAW95454 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kuberasampath
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21-NOV-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-FEB-1992;
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                                                                                                                                                                                                                 23
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DB; AAQ53141.
                                                                                                                                                                                                                                                                  69
                                                                                                                                                                                                                                                                                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRYKER CORP
medullary cystic disease;
                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Col 69-72; 128pp; English
                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                               100.0%; ilarity 100.0%; Conservative 0
                                                                                  truncated mature human OP1, OP1-16Val (residues 318-431).
                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Η,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90US-00600024.
90US-00616374.
90US-00621849.
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90US-00599543
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                                                                                                                                                                                  protein;
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                                                                                                                   entry)
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                                                                                                                                                                                                                                                                                                                                 Score 111; DB 2;
Pred. No. 5.1e-07;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cartilage and with a matrix
                                                                                                                                                                                                                                                                                                                                                               Length 114;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to methods for treating cystic kidney diseases. The CC method comprises administering an effective amount of a renal therapeutic congent or a polynucleotide encoding the therapeutic agent is preferably a soluble or membrane bound polypeptide, e.g. a comember of the osteogenic protein/bone morphogenic proteins. It is cespecially one of the polypeptides hope, hope hope of proteins it is compared by the conformal protein (OPHSMP) family compared by the conformal protein of proteins of p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                    Osteogenic protein; bone; cartilage; matrix; ostevascularisation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.
                                                                                                                                                                                                                                                                                                                          N-terminally truncated osteogenic protein OP1 (OP1-16Ala)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-070084/06.
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       30-NOV-1993
                                                                           US5266683-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR53362;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Page; 67pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; protein; 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS
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(revised)
(first entry)
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Pred. No. 5.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                         matrix; osteoarthritis;
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Best Local S
Matches 20
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18-OCT-1990;
21-NOV-1990;
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23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-15Ala. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                  Homo
                                                                                        Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OPI; truncated.
                                                                                                                                                         N-terminally truncated
                                                                                                                                                                                                             AAW95453;
                                                                                                                                                                                                                                      AAW95453 standard; protein; 116
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 116 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
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07-SEP-1990;
                                         WO9850061-A1
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ilarity 100.0%;
Conservative (
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90US-00569950
90US-00579865
90US-00599543
90US-00616374
90US-00616374
90US-00621849
90US-00621849
91US-0062198
91US-00817656
91US-0081765
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88US-00232630.
89US-00315342.
89US-00422613.
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90US-00483913.
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                                                                                                                                                          mature human OP1,
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Pred. No. 5.1e-07;
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                                                                                                                                                           OP1-16Ala (residues
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12-NOV-1998

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RESULT 26
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Best Local
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
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01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       member of the osteogenic protein/bone morphogenic protein; Polypepide, 1939 amily within a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hop1-pp, Op1-16Ser, Op1-16Leu, Op1-16Net, Op1-16Ala, Cp1-16Val, mCp1, mCp1-pp, hOp2-pp, hOp2-Pp, hOp2-Ala, hOp2-Pro, hOp2-Arg, or hOp2-Pro, h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to methods for treating cystic kidney diseases method comprises administering an effective amount of a renal therapeu agent or a polynucleotide encoding the therapeutic agent. The therapeu agent is preferably a soluble or membrane bound polypeptide, e.g. a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                          08-APR-1988;
                                                                     21-FEB-1992;
                                                                                                  30-NOV-1993.
                                                                                                                             US5266683-A
                                                                                                                                                       Homo sapiens
                                                                                                                                                                                    Osteogenic protein; bone; cartil; vascularisation; mineralisation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 116
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.
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(revised)
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                                                                                                                                                                                                                             truncated osteogenic protein OP1
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88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
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                                                                                                                                                                                                                                                        entry)
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                                                                                                                                                                           cartilage; matrix; consation; differentiation
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Pred. No. 5.1
); Mismatches
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                                                                                                                                                                                                   matrix; osteoarthritis;
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5.1e-07;
es 0;
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AAW95452
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Matches
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Best Local :
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04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-OCT-1989;
22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
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18-OCT-1990;
21-NOV-1990;
Gjorstrup P,
                                                           07-MAY-1997;
                                                                                    06-MAY-1998;
                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                     26-MAR-1999
                                                                                                                                                                                                                                                                                                                                AAW95452
                                                                                                                                                                                                                                                                                                                                                            AAW95452 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 117 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath
                                                                                                                                              WO9850061-A1
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                            (BIOJ )
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                              BIOGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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   Harris R;
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92US-00827052
                                                           97US-0045909P
                                                                                      98WO-US009268
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                                                                                                                                                                                                                                                                                                    entry)
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This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-18Met. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
Cystic kidney disease; renal; therapeutic; osteogenic protein; OP bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OP1; truncated.
                                                                                                             N-terminally truncated mature human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New pure mammalian osteogenic proteins - induce endochondral bone formation when in association
                                                                                                                                                                                                                                                                                                                                                                                                    1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS
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90US-00600024.
90US-00616374.
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90US-00483913.
90US-00569920.
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90US-00621988.
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                                                                                                                                                                                                                                            protein; 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 111; DB 2;
Pred. No. 5.2e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                            91
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                                                                                                                OP1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DC,
                                                                                                             OP1-16Met (residues 315-431).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cartilage and with a matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                      OP;
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RESULT 28
AAY92595
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
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                                                                         A biologically active TGF-beta family member fusion protein competent refold, comprising a C-terminal linked TGF-beta family protein.
Claim 16; Page 153-154; 160pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                             07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      finger 2 subdomain; BMP; TGF-beta family; protein refolding; OP-1;
fusion protein; osteopathic; antibacterial; cytostatic; mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Trypsin truncated H2223 mutant OP-1.
                                                                                                                                                                                                WPI; 2000-303743/26
                                                                                                                                                                                                                                                                          Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-070084/06
                                                                                                                                                                                                                                                                                                                                                   (STYC ) STRYKER CORP.
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                                                                                                                                                                                                                                                                      Tai M,
                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0103418P
99US-00375333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US023372
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                                                                                                                                                                                                                                                                          Mccartney
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Pred. No. 5.2e-07;
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RESULT 29
AAB09548
ID AAB09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This is a trypsin truncated mutant H2223 OP-1 construct. Novel proteins comprise biologically active TGF-beta family member fusion proteins competent to refold under suitable refolding conditions. The fusion competent to refold under suitable refolding conditions. The fusion comprise: (1) a TGF-beta family protein C-terminal seven crysteine domain, comprising finger 1, finger 2 and heel subdomains; and crysteine domain. Truncations, heterodimers and mutants of these fusion proteins and methods of purifying the heterodimers are also claimed. The TGF-beta family proteins can be used to induce the full cascade of comprise cartilage and endochronal bone formation. They are useful in cluding cartilage and endochronal bone formation. They are useful in conditions of fibrin and fibronectin to the implanted matrix, chemotaxis of cells, proliferation of fibroblasts, differentiation into cremodeling, and bone marrow differentiation. The proteins have improved physical properties such as solubility and stability, improved biological activity, including altered receptor binding and improved targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 20
                                                         Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental ti
                            Claim 51; Page 155-156; 162pp; English
                                                                                                                                                                                                                                        07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 117
                                                                                                                                                                                                                                                                                        07-OCT-1999;
                                                                                                                                                                                                                                                                                                                      13-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Trypsin truncated OP-1 mutant protein H2223,
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                                                                                                                                           WPI; 2000-303787/26
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                                                                                                                                                                                                          (STYC ) STRYKER CORP
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20; Conserv
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                                                                                                                                                                         Tai M,
                                                                                                                                                                                                                                        98US-0103418P
99US-00374958
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                                                                                                                                                                           Mccartney J;
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Pred. No. 5.2e-07;
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The invention relates to mutant TGF-beta

(transforming growth

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CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include proteins (BMPs), growth/differentiation factors (GDPs) and inhibins. CC Specific examples of TGF-beta superfamily mutants encompassed by the invention are the finger 2 subdomain mutants of human osteogenic protein-CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, dental tissue, connective tissue, brain, liver and nerve tissue. The CC collagen, hydroxyapative or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissue e.g., ligament, tendon, muscle, fibrocartilage, joint capsule and condamaged mammalian tissue and to prevent or substantially inhibit comparties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences ABB09547-B09548 and CC properties in a pH range of 6-9 increased solubility in aqueous solution and improved stability and/or activity. Sequences ABB09547-B09548 and CC properties in a pH range of 6-9 increased solubility in aqueous solution and improved stability and/or activity. Sequences ABB09547-B09548 and conditions and the condition of the matant or chimeric forms of human osteogenic conditions and conditions of human osteogenic conditions and conditions of human osteogenic conditions conditions of human osteo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                bone morphogenic protein; osteogenic protein; mutant; modified; finger 2 sub-domain; finger i domain; heel domain; chimeric protein; osteogenic; proliferative; antiinflammatory; tissue morphogenesis; tissue repair; regeneration; proliferation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 117 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human trypsin truncated H2223 mutant amino acid sequence SEQ ID NO:69
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                      WPI; 2000-303776/26
                                                                                                                                                                                                                                 07-OCT-1998;
16-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                              (STYC ) STRYKER CORP
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                                                                                            Tai M,
                                                                                                                                                                                                                                 98US-0103418P.
99US-00374936.
                                                                                                                                                                                                                                                                                                                                        99WO-US023370.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 3;
100.0%; Pred. No. 5.2e-07;
tive 0; Mismatches 0;
                                                                                                Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 117;
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DT 07:
CT 08:
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Best Local (
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01-JUL-2002
06-JUN-1994
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72

Query Match Best Local (Matches

20;

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Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one monomer containing domains from two family members.
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Disclosure; Page 142-143; 149pp; English.

The present invention describes a tumour growth factor beta (TGF-beta)
CC superfamily chimeric protein (I) derived from at least 2 different
CC members of the superfamily comprising a dimer with one monomer that
CC contains a finger 2 domain derived from a first family member and a
CC finger 1 domain and heel domain, both derived from a second family
CC member. The monomer further comprises a conserved C-terminal cysteine
CC skeleton. (I) has osteogenic, proliferative and antiinflammatory
CC activities. The TGF-beta superfamily chimeric proteins (I) are useful for
CI inducing tissue morphogenesis (i.e. molecules capable of tissue repair
CC and regeneration and/or inhibiting inflammation) in bone, non-mineralised
CC skeletal tissue, dental tissue, connective tissue, brain, liver and nerve
CC and for inducing the proliferation and differentiation of uncommitted
CC grogenitor cells in a tissue-specific manner to support new tissue
CC formation. AAA29887 to AAA29897 and AAB02748 to AAB02824 represent
CC sequences used in the exemplification of the present invention

Sequence 117 ĀĀ;

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Similarity
           INPETVPKPCCAPTQLNAIS
INPETVPKPCCAPTQLNAIS
                                  Conservative
                                         100.0%;
                                  0
91
                                 Score 111; DB 3;
Pred. No. 5.2e-07;
Mismatches 0;
                20
                                                  Length 117;
                                   Indels
                                   0
                                   Gaps
                                    0
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AAR53364 standard; protein; 119

N-terminally truncated osteogenic protein OP1 (OP1-16Leu)

(revised)
(first entry)

Osteogenic protein; bone; cartilage; matrix; osteoarthritis; vascularisation; mineralisation; differentiation.

18-OCT-1990; 21-NOV-1990; 04-DEC-1990; 04-DEC-1990; 22-FEB-1991; 08-APR-1988; 15-AUG-1988; US5266683-A 22-FEB-1990 21-FEB-1992; 30-NOV-1993 90US-00579865. 90US-00599543. 90US-0060024. 90US-00616374. 90US-00621849. 90US-00621849. 90US-0062198. 91US-00810560. 91US-00810560. 89US-00315342. 89US-00422613. 89US-00422699. 92US-00841646 88US-00232630 88US-00179406 90US-00569920. 90US-00483913.

RESULT 30
AAB02814
ID AAB02812
XX AAB02
XX AAB02
XX AAB02
XX Tumon
CH Finge
KW Finge
KW Sone
KW Cises
XX Homo
OS Synth
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OS Synth
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OS Synth
XX Homo
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Synthetic

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RESULT 32
AAW95451
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Matches 20
The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic agent is preferably a soluble or membrane bound polypeptide, e.g. a
                                                                                                                                                                                                                                                                                                                                                                       polycysti
uraemic n
                                                                                            morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-16Leu. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.)
                                                                    Claim 4;
                                                                                                                                                   WPI; 1999-070084/06.
                                                                                                                                                                            Gjorstrup P,
                                                                                                                                                                                                                                   07-MAY-1997;
                                                                                                                                                                                                                                                               06-MAY-1998;
                                                                                                                                                                                                                                                                                         12-NOV-1998.
                                                                                                                                                                                                                                                                                                                   W09850061-A1.
                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                 Cystic kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                        N-terminally truncated mature human OP1, OP1-16Leu (residues 300-431).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW95451 standard; protein; 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 119 AA;
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                                                                                                                                                                                                         (BIOJ ) BIOGEN INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (STYC)
                                                                                                                                                                                                                                                                                                                                                                    morphogenic protein; BMP; growth factor-beta superfamily; cystic kidney disease; multicystic dysplastic kidney disease; mic medullary cystic disease; human; OP1; truncated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1993-395405/49
DB; AAQ53141.
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20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRYKER
                                                                                                         cystic kidney disease - using renal therapeutic agents or sencoding them, especially from the osteogenic protein/bone
                                                                  Page; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVEKECCAPTOLNAIS
                                                                                              protein family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                              Harris
                                                                                                                                                                                                                                                                                                                                                                                                              disease; renal; therapeutic; osteogenic protein; OP;
                                                                                                                                                                                                                                   97US-0045909P
                                                                                                                                                                                                                                                               98WO-US009268
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
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Pred. No. 5.3e-07;
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hen in association
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cartilage and with a matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oppermann
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Best Local S
Matches 20
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12-JAN-1994;
31-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GDP-5; growth differentiation factor 5; TGF-beta; human; OP-1; transforming growth factor beta; skeletal development; endometriosis; cartilage differentiation; cell proliferative disease; uterine tumour bone dysplasia; spondylopithyseal dysplasia; achondroplasia; dysplasia; enchondroplasia; metaphyseal dysostosis; hyperchondroplsia; enchondromatosis; hypophosphatasia; osteopetrosis; hyperphosphatasia; craniometaphyseal dysplasia; osteogenesis imperfecta; transgenic; idiopathic osteoporosis; Engelman's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            member of the osteogenic protein/bone morphogenic protein (OP/BMP) family within a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hop1-pp, Op1-18Ser, Op5, Op7, Op1-16Ser, Op1-16Leu, Op1-16Met, Op1-16Ala, Op1-16Val, mOp1, mOp1-pp, hop2-pp, hop2-Ala, hop2-pro, hop2-Arg, or hop2-ser or their biologically active homologues. The method is used to treat humans having, or at risk of, cystic kidney disease, e.g. autosomal recessive (infantile) polycystic disease, multicystic dysplastic kidney disease, uraemic medullary cystic disease, and autosomal dominant polycystic kidney disease, and autosomal dominant polycystic kidney disease. The present sequence represents a N-terminally truncated mature human osteogenic protein 1 (Op1) that can be used as a therapeutic agent in the method of the invention. Note: This sequence is not provided in the specification. It has been derived from the human Op1 sequence (AAW95448) obtained from U.S. Patent No. 5,266,683
                                                                                                                                     New antibody specifically binding to a GDF-5 polypeptide, useful for diagnosing and treating cell proliferative disorders with aberrant activity, such as endometriosis, uterine tumors and those involving the content of the content 
                                                                                                                                                                                                                                                                   WPI; 2003-255226/25
                                                                                                                                                                                                                                                                                                                             Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                  <del>⊢</del>3
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94WO-US000657.
95US-00455559.
98US-00145060.
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Pred. No. 5.3e-07;
; Mismatches 0;
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                                                                                                                                                                              GDF-5
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Example 2; Fig 3A; 36pp; English

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Matches Query Match Best Local

Sequence

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GC growth factor beta) superfamily of proteins) polypeptide appearing as ABG76018. In order to determine the biological activity of GDF-5 in vivo, CC transgenic mice were constructed that express GDF-5 ectopically. Analysis of two independent transgenic muse lines showed that these animals have ectopic bone formation with evident muscle tissue. This showed that GDF-5 cc was capable of inducing bone formation in vivo. The antibody is useful for the diagnosis and treatment of cell proliferative disorders associated with aberrant GDF-5 activity, such as endometriosis, uterine tumors, those involving skeletal tissues, endometriosis, cartilage cd differentiation, cell proliferative disease, uterine tumour, bone dysplasia, spondylopithyseal dysplasia, achondroplasia, dysplasia cepihnysialis, metaphyseal dyspstosis, hyperchondroplasia, dysplasia, craniometaphyseal dysplasia, osteogenesis imperfecta, idiopathic costeogorosis and Engelman's disease. The present sequence represents a member of the TGFbeta superfamily used to determine regions of sequence similarity for design of degenerate primers for isolation of GDF-5
                                             The invention provides an osteogenesis stimulating fused protein (I) for a drug delivery system (DDS) of osteogenetic factor, having collagen avidity and polypeptides homologous to collagen avidity domain or its modified peptides. (I) is used for stimulation of osteogenesis, a localizing agent and a slow releasing agent for a drug delivery system. The present sequence represents the human BMP7 with enterokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteogenesis; drug delivery system; DDS; BMP7; enterokinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JP2002058485-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABB07963 standard; protein; 131 AA
                                                                                                                                                                                                                                                                     Disclosure; Page 22; 30pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2000; 2000JP-00246744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-AUG-2000; 2000JP-00246744.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002-438612/47.
                                                                                                                                                                                                                                                                                                                                osteogenesis stimulating fused protein having collagen avidity used osteogenesis stimulator and a localizing agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TERUMO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           with enterokinase recognition sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 6;
Pred. No. 5.3e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                collagen; osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                    for
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ARSSULT 3:

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Best Local S
Matches 20
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01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-AUG-1990;
07-SEP-1990;
18-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR53365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US5266683-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osteogenic
                                                                                                                                                                                                                                                                                                                                             Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (STYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-NOV-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _
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RESULT 34
ABB07963
ID ABB077
XX
XX ABB077
XX
AC ABB07
XX
AC ABB07
XX
AC ABB07
XX
OStec
KW OST

(TERU)

26-FEB-2002

Sequence 131

AA

Query Match

100.0%;

Score

BB

2

Length 132

Sequence 132 AA;

Homo

Human

12-AUG-2002 ABB07963

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This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-16Ser. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-terminally truncated osteogenic protein OP1 (OP1-16Ser)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein; vascularisation; mi:
                                                                                                                                                                                                                                         New pure mammalian osteogenic proteins - induce endochondral bone formation when in association
                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath T,
                                                                                                                                                                                                                                                                                                                             1993-395405/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                Col 69-72; 128pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91US-00810560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91US-00660162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90US-00621849.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in; bone; cartilage; matrix; ost;
mineralisation; differentiation
                                                                                                                                                                                                                                                                                                                                                                       Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein; 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
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                                                                                                                                                                                                English.
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Pred. No. 5.8e-07;
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                                                                                                                                                                                                                                                                                                                                                                       Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                       Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                         RHL,
                                                                                                                                                                                                                                           cartilage and with a matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 131;
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                                                                                                                                                                                                                                                                                                                                                                         Oppermann
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RESULT 36
AAW95450
AAW955
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                                                                                                                                                                                                                                                                                     The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic cagent is preferably a soluble or membrane bound polypeptide, e.g. a member of the osteogenic protein/bone morphogenic protein (OP/BMP) family within a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hop1-pp, op1-18Ser, OP5-OP7, CC OP1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1, mOP1-PP, OP2-PP, hOP2-PP, hOP2-Ala, hOP2-Pro, hOP2-Arg, or hOP2-Arg, or hOP2-Ser or their CC biologically active homologues. The method is used to treat humans CC having, or at risk of, cystic kidney disease, e.g. autosomal recessive (infantile) polycystic disease, multicystic dysplastic kidney disease, curaemic medullary cystic disease, and autosomal dominant polycystic kidney disease. The present sequence represents a N-terminally truncated mature human osteogenic protein 1 (OP1) that can be used as a therapeutic agent in the method of the invention. Note: This sequence is not provided in the specification. It has been derived from the human OP1 sequence (AAM95448) obtained from U.S. Patent No. 5,266,683
                                                                                                                  Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OP1; truncated.
                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Page; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               morphogenic protein family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-070084/06.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POIE)
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87
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                                                                                                                                               Similarity
                                                                                                                                                                                                                                        132
INPETVPKPCCAPTQLNAIS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTOLNAIS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                      INPETVPKPCCAPTQLNAIS
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                                                                                                                     Conservative
                                                                                                                                                                                                                                        A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Harris
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                                                                                                                                               100.0%;
                                                                                                                  0
                                                                                                                                               Score 111; DB 2;
Pred. No. 5.8e-07;
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mismatches 0;
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                                                                                                                     Mismatches
                                                                                                                                                                        Length 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                     Indels
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                                                                                                                  Gaps
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                                                                                                                  0;
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RESULT 38
AAR23187
ID AAR23
XAXAAAXBXAAX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 37
AAY08297
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes the novel preparation of biologically active dimers of recombinant human growth factors of the cysteine knot family starting from cellular inclusion bodies. Such dimers are are useful in pharmaceutical compositions and the method provides yields of 31-39.7%, in examples, compared with about 10% for the conventional method (see Biochemistry, 28 (1989) 2956). ARV08278-V08301 are human growth factor protein fragments used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                   27-AUG-2003
01-JAN-1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR23187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 138 AA;
                                                                                                                                                                        Mammalia
                                                                                                                                                                                                                                               Osteogenic;
                                                                                                                                                                                                                                                                                                                                   Osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR23187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 14; Page 11; 14pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Preparing active growth factor dimers from inclusion bodies in yield.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Growth factor; human; dimer; cysteine knot; cellular inclusion body;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-278785/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kaerst U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DE19748734-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human growth factor protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY08297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY08297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GBFB ) GES BIOTECHNOLOGISCHE FORSCHUNG MBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 100.0%; l Similarity 100.0%; 20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mueller C,
                                                                                                                                                                                                                                                                                                                                   protein for dispersal in implantable osteogenic
                                                                                                                                                                                                                                               implant; endochondral; bone;
                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97DE-01048734
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rinas U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 2;
Pred. No. 6.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Weich H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BMP-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Erdmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ξ
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Query Match
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Region
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26-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an implantable device for inducing endochordal bone formation in a shape conforming to the shape of the device. The device comprises an osteogenic protein dispersed in a porous matrix which is a polymer of collagen and glycosaminoglycan crosslinked to an Mc value of 800 to 60,000. The osteogenic protein comprises a pair of subunits constituting a stable dimer under oxidising conditions. The present sequence (designated OP1), when dimerised to form a homodimer or a heterodimer with certain other protein sequences, can induce endochordal bone formation and hence is preferred as one of the pair of subunits. (Updated on 27-AUG-2003 to correct OS field.)
Compsns. for increasing progenitor cell population - contain a morphogen to induce proliferation, useful for inhibiting neoplastic growth,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mature human osteogenic protein hOP1.
                                                                       WPI; 1992-331475/40
                                                                                                                     Cohen
                                                                                                                                                                                                         11-MAR-1991;
                                                                                                                                                                                                                                                    11-MAR-1992;
                                                                                                                                                                                                                                                                                                  17-SEP-1992.
                                                                                                                                                                                                                                                                                                                                               WO9215323-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Morphogen; morphogenic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR27285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR27285 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic device for implantation - co dispersed in porous matrix of collagen
                                                                                                                                                              (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 34; 39pp; English.
                                                                                                                Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ΑA;
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(first entry)
                                                                                                                                                                                                           91US-00667274.
                                                                                                                                                                                                                                                    92WO-US001968
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                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers 38. .139
                                                                                                                                                                                                                                                                                                                                                                                           /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                   "conserved seven cysteine skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TL;
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                                                                                                                Pang RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
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    comprising osteogenic pagen and glycosaminoglycan.

                                                                                                              Oppermann
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                                                                                                              Rueger DC
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Best Local S
Matches 20
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01-JUL-2002
06-JUN-1994
                                                                                                              WPI;
                   New pure mammalian osteogenic proteins - induce endochondral bone formation when in association
                                                                                        N-PSDB;
                                                                                                                                                         Kuberasampath
                                                                                                                                                                                                                                                                                                                   04-DEC-1990
04-DEC-1990
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                                                                                                                                                                                                    (STYC)
                                                                                                                                                                                                                                                                                                                                                                21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG-1990
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                                                                                                                                                                                                                                                                                                                                                                                      .8-OCT-1990
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Mature hOP1 is one of the preferred known morphogens which can be used in the manufacture of pharmaceuticals for inducing non-chondrogenic mammalian tissue growth, progenitor cell proliferation and hepatic tissue growth and for maintaining the phenotypic expression of differentiated cells in a mammal. Morphogens sharing at least 70% homology with hOP1 or at least 65% identity with residues 43-139 of hOP1 are included. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-terminally truncated osteogenic protein OP1 (OP1-18Ser).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Osteogenic protein; bone; cartilage; matrix; ostevascularisation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR53366 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 139 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 11; Page 82-83; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inducing tissue repair and in diagnosis
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STRYKER CORP.
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(revised)
(first en
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91US-00810560
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90US-00621988.
                                                                                                                                                                                      90US-00579865.
90US-00599543.
                                                                                                                                                90US-00616374
                                                                                                                                                                    90US-00600024.
                                                                                                                                                                                                                                   90US-00569920.
                                                                                                                                                                                                                                                       89US-00422699
90US-00483913
                                                                                                                                                                                                                                                                                                                                                                                                      92US-00841646
                                             92US-00827052
                                                                                                                                                                                                                                                                                                89US-00422613
                                                                                                                                                                                                                                                                                                                  89US-00315342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              matrix; osteoarthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of tissue dysfunction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repair;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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ax 555555555

Claim

13;

Col

69-72;

128pp; English.

This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-18Ser. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)

RESULT 41 AAR33921 ID AAR33

standard;

protein; 139

AAR33921; AAR33921

Morphogen hOP-1. 25-MAR-2003 13-JUL-1993

(revised) (first en

entry)

В

94 س

INPETVPKPCCAPTQLNAIS 20

INPETVPKPCCAPTQLNAIS 113

Query Match Best Local Matches

ch 100.0%; l similarity 100.0%; 20; Conservative C

0,

Score 111; DB 2; Pred. No. 6.1e-07; Mismatches

Length 139;

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0

Sequence 139 AA;

0

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The sequences given in AAR33921-30 are morphogens derived from human, Drosophila, Xenopus and murine sources. These morphogens are inactive when reduced but are active as oxidised homodimers and when oxidised i combination with other morphogens. These morphogens are capable of stimulating proliferation of progenitor cell, stimulating the differentiation of progenitor cells, stimulating the proliferation of differentiated cells and supporting the growth and maintenance of differentiated cells, including the redifferentiation of transformed cells. These morphogens may also be capable of inducing redifferentiation of committed cells under appropriate environmental conditions.
                                                                                                                                                                                                                             Screening cpds. to determine ability to modulate effective concn. morphogen - by assaying test tissue type cells for parameter indicof a prodn. level change of morphogen.
                                                                                                                                                                                                                                                                                                                    Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Morphogen; homodimer; stimulate; proliferation; progenitor cell; differentiation; growth; redifferentiation; transformation; huma
                                                                                                                                                                                                                                                                                        WPI; 1993-100993/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W09305172-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila; Xenopus; committed cells.
                                                                                                                                                                                                  Disclosure; Page 73-74; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                            30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                        28-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                (CREA-) CREATIVE BIOMOLECULES INC
                           (Updated
                                                                                                                                                                                                                                                                                                                     RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens.
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                             ខ្ព
                                                                                                                                                                                                                                                                                                                     Oppermann
Cohen CN;
                             25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                            91US-00752861
                                                                                                                                                                                                                                                                                                                                                                                                                         92WO-US007359
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                             to correct
                                                                                                                                                                                                                                                                                                                                     Ozkaynak E,
                                PN field.)
                                                                                                                                                                                                                                                                                                                                      Kuberasampath
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                                                                                                                                                                                                                                                                                                                                      Rueger DC;
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of.

рb

in

0

Sequence 139

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RESULT 42
AAR33398
ID AAR333
XX AR33
XX AR33
XX AR33
XX DT 25-MA
DT 15-JU
XX Humar
XX Hop-1
KW hop-1
KW decop
KW decop
KW morph
KW Trans
XX Trans
XX Homo
OS Glai
OC Clai
CC Humar
CC Humar
CC Gat Li
CC Gregues
OS Seque
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Best Local S
Matches 20
                                                      Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                               30-AUG-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    morphogenic; osteogenic protein; developmental cascade; hOP-1; mouse OP-1; mCP-1; hOP-2; mCP-2; CBMP2B; CBMP2B; decapentaplegic; Xenopus Vgl; mouse Vgr-1; GDF-1; BMP3; morphogen 60(A); inflammation; anti-inflammatory; Transforming Growth Factor; TGF-beta super-family.
                                                                                                                                       Human osteogenic protein (OP)-1 is a preferred morphogen for use in treating tissue damage in e.g. inflammatory disease, autoimmune disease, arthritis, psoriasis, dermatitis, diabetes and emphysema. Proteins having at least 60% homology with amino acids 43-139 of hOP-1 can also be used. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                         Morphogen-induced modulation of inflammatory response
tissue damage, e.g. in autoimmune diseases, diabetes,
                                                                                                                                                                                                                                                                                                                                          Kuberasampath
Ozkaynak E, S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human mature OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR33398
                                                                                                              Sequence 139 AA;
                                                                                                                                                                                                                             Claim 30; Page 102; 165pp; English
                                                                                                                                                                                                                                                                                                               WPI; 1993-100652/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9304692-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-MAR-1993.
                                                                                                                                                                                                                                                                                                                                                                                    (CREA-) CREATIVE BIOMOLECULES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94
 94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                        damage, e.g. in autoimmune usion injury, etc.
                            1 INPETVPKPCCAPTQLNAIS
                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 113
 INPETVPKPCCAPTQLNAIS
                                                      100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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(first ent
                                                                                                                                                                                                                                                                                                                                           n T, E
Smart
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91US-00752861.
91US-00753059.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43. .139
/label= C-terminal_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "contains conserved 6 Cys skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 2;
100.0%; Pred. No. 6.1e-07;
Live 0; Mismatches 0;
                                                         0
                                                                                                                                                                                                                                                                                                                                                         Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                        Score 111; DB 2;
Pred. No. 6.1e-07;
                               20
                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                            Ä
                                                                                                                                                                                                                                                                                                                                                            Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 139;
                                                                                     Length 139;

    and resulting
asthma, ischaemia

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human OP-1;
Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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                                                                                                                                                                                                                                                                                                                                                               3
                                                             Gaps
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human;

mouse;

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RESULT 43
AAR31467
ID AAR31
AC AAR31
AC
ARAGATZA

ARAGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequences given in AAR31467-69 represent the subunits D, B and C of P3 0.7 31-34, respectively. P3 OF 31-34 is an osteogenically active protein. A primary osteogenically active peptide is formed of a heterodimer of P3 OF 31-34 subunits B and D which are linked by at least one disulphide bond. The B/D heterodimer stimulates osteo- genesis and can be used to induce bone formation in mammals, to repair bone defects. (Updated on 25-MAR-2003 to correct PN field.)
                                                                   human osteogenic protein; hOP1; morphogen; infant food tissue morphogenesis; tissue development; bone growth; morphogen-enriched nutritional product.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteogenically active comprise hetero-dimer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
26-MAY-1993
                                                                                                                                                                                                                             Human mature
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25-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR46724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Grinna L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JAN-1993.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Subunit; D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR31467 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (XOMA ) XOMA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ34514.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
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llarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                         osteogenic protein hOP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ÃĄ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-34 subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first en
                                                                                                                                                                                                                                                                                                (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   107pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein preparations for repairing bone defects - of P3 OF 31-34 sub-unit B and P3 OF 31-34 sub-unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Parsons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ū
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            osteogenic; active;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 139;
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                                           15-SEP-1992;
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16-SEP-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                  OP-1; OP-2; CBMP2; Vgl(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); Osteogenic protein; morphogene; morphogenein; morphogeneis; progenitor; differentiation; stimulation; Drosophila melanogaster; fruit fly.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           suitable for people at risk for tissue damage due to protein energy mainutrition or to altered metabolism function and infant formulations to enhance tissue development in an infant or juvenile. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human osteogenic protein hOP1 and proteins having at least 70% homology with it are preferred morphogens for inclusion in new morphogen-enriched nutritional formulations. The formulations are dietary compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Morphogen enriched dietary compositions and infant formula - cape enhancing tissue morphogenesis, development and viability, e.g. infants, aged individuals and metabolic disorders, e.g. anorexia
                                                                                                                                                                                          31-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mature human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR60967;
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                                                                                                                                            15-SEP-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
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92US-00946235.
93US-00029335.
93US-00040510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 111; DB 2;
Pred. No. 6.1e-07;
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                        The DNA sequences given in AAQ89255-59 encode the bone morphogenetic proteins BMP-2, BMP-4, BMP-5, BMP-6 and BMP-7 (AAR71970-74), respectively. The DNA is used to prepare mutant forms of recombinant BMPs, as well as BMP homodimers or heterodimers, that are expressed bacteria, pref. Escherichia coli G1724 (ATCC 55155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila 60A protein morphogenically active fragments - - for tissue morphogenesis, increasing progenitor cell populations, progenitor cells to differentiate, etc.
Sequence 139 AA;
                                                                                                   Disclosure; Col 25-26; 16pp; English.
                                                                                                                                                                                                        Wolfman
                                                                                                                                                                                                                                                                                                                                                                                      BMP-7; bone morphogenetic protein
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                                                                                                                                                                   N-PSDB;
                                                                                                                                                                                                                                                          07-DEC-1993;
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                                                                                                                           Bone morphogenetic proteins (BMPs) and corresp. of correctly folded, biologically active BMPs is
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Pred. No. 6.1e-07;
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                                                                                                                                                                                                                                                                            Mouse embryo osteogenic protein OP-1 (AAW00222) is a morphogenically active dimeric protein having a C-terminal 7-cysteine domain that shares a defined relationship with similar domains of other morphogenic proteins (see also AAW00219-35). It comprises amino acids 292-430 of full-length OP-1 (AAW00237), and can be expressed from intact or truncated cDNA (see also AAT33442) in prokaryotic or eukaryotic host cells. Mouse OP-1 and other morphogens, partic. human OP-1 (AAW00221), can be used to induce dentine morphogenesis, to seal dental cavities and to desensitise teeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of morphogen(s), e.g. osteogenic proteins, on dentinal surfaces - inducing dentine morphogenesis, desensitising teeth or sealing tooth cavities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Morphogen; osteogenic protein; dentine; tooth decay; caries;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW00222 standard; protein; 139
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INPETVPKPCCAPTQLNAIS
                                                    INPETVPKPCCAPTQLNAIS 20
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                                                                                                        Conservative
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/note= "7-cysteine_domain
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Pred. No. 6.1e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                      Length 139;
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                                                                                                        Indels
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                                                                                                        Gaps
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RESULT 48
AAW00221
ID AAW00

AAW00221 standard; protein; 139

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RESULT 49
AAW40180
ID AAW4C
XX
AAW4C
XX
AAW4C
XX
OB-JU
XX
OStec
KW Chror
KW nephi
KW nephi
XX
OS
Homo
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                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                 Human hippocampus osteogenic protein OP-1 (AAM00221) is a morphogenically active dimeric protein having a C-terminal 7-cysteine domain that shares a defined relationship with similar domains of other morphogenic proteins (see also AAW00219-35). It comprises amino acids 293-431 of full-length Op-1 (AAW00236), and can be expressed from intact or truncated cDNA (see also AAT33441) in prokaryotic or eukaryotic host cells. OP-1 and other morphogens are used to induce dentine morphogenesis, to seal dental cavities and to desensitise teeth to pressure and/or temp
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Use of morphogen(s), e.g. osteogenic proteins, on dentinal surfaces inducing dentine morphogenesis, desensitising teeth or sealing tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9626737-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 morphogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Morphogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-NOV-1996
                    Osteogenic protein; OP-1; bone morphogenic protein; OP/BMP family; chronic renal failure; renal therapeutic agent; disease; diabetes; nephropathy; glomerulopathy; hypertrophy; sclerosis; nephritis; human; dysplasia; fibrosis; glomerular filtration rate; GFR.
                                                                                                                                                                                                                                                                                             Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 28; Page 42; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                              cavities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW00221;
                                                                                                                                               AAW40180 standard;
Homo sapiens
                                                                             Human hOP1 mature protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CREA-)
                                                                                                                                                                                                        94
                                                                                                                                                                                                                                                  20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                        INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  osteogenic protein; dentine; tooth decay; caries; sis; odontoblast; OP-1.
                                                                                                                                                                                                                                               100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                             AA:
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                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96WO-US002169
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/note= "7-cysteine_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                               protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RВ
                                                                                                                                                139
                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                 Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of OP-1"
                                                                                                                                                                                                                                                                      Length 139;
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Best Local S
Matches 20
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                                                                                           Homo
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   22-JUL-1997
                         US5650276-A
                                                        Region
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This sequence represents the mature human osteogenic protein, hOP-1. This protein is used in a method for the treatment of a mammal having, or at risk of, chronic renal failure which comprises administering an osteogenic protein/bone morphogenetic protein (OP/BMP) renal therapeutic agent or morphogen. The method can be used for treating e.g. chronic renal failure, end-stage renal disease, chronic diabetic nephrogathy, diabetic glomerulopathy, diabetic renal hypertrophy, hypertensive nephrosclerosis, chronic glomerulonephritis, hereditary nephritis, renal dysplasia, or a patient afflicted with e.g. glomerular hypertrophy, tubular hypertrophy, therapeutic agents can prevent, inhibit or delay the progressive loss of functional nephron units and the progressive decline in glomerular filtration rate (GFR) which slowly but inevitably leads to the need for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treatment of chronic renal failure - using an morphogenetic protein renal therapeutic agent mesenchymal progenitor cells.
                                                                                             Human osteogenic protein; OP; OP-1; morphogen; morembryogenesis; organ maintenance; tissue-specific arthritis; emphysema; osteoporosis; cirrhosis.
                                                                                                                                                                                             25-MAR-2003
10-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 44; 113pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-MAY-1996;
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                                                                                                                                                           Mature protein amino acid sequence of human osteogenic protein 1 (hOP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1997-558690/51.
                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       replacement
                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                         standard; protein; 139
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                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                          (revised)
(first entry)
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               Location/Qualifiers
 /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
"conserved 7 Cys
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Pred. No. 6.1e-07;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                         20
 skeleton"
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                                                                                                                morphogenesis;
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RESULT 51
AAW54064
ID AAW54
XX AAW54
XX AAW54
XX DT 25-M2
DT 10-AU
XX Bone
XX Bone
KW Bone
KW bone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC AAWYSSS4-62) Comparison of the amino acid sequences of these morphogens CC AAWYSSS4-62) Comparison of the amino acid sequences of these morphogens CC has identified a consensus 6-7 cysteine motif at the C-terminal.

CC maphogenic proteins such as OP-1 play an important role, not only in comparison to the protein such as OP-1 play an important role, not only in companies. They induce a developmental cascade of tissue-specific compounds in a mammal. A novel method is described for screening a candidate compound for the ability to modulate expression of a cellular compound is incubated with epithelial cells which express the cellular compound is incubated with epithelial cells which express the cellular compound is incubated with epithelial cells write express the cellular compound is incubated with epithelial cells write express the cellular compound is in the amount of the protein expressed by the cellular gene. A change in the level of the morphogenic protein relative to the level in the epithelial cells in the absence of the candidate compound is increase of the ability of the compound to modulate expression of the cellular gene. The method can be used to identify compounds which can be used in the treatment of, e.g. arthritis, emphysema, osteoporosis, can consider the compound diseases, lung diseases, cardiomyopathy, and cirrhosis of the control of the cardidated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents the mature protein of human osteogenic protein-1 (hOP-1). hOP-1 was first found in bone tissue, and is now kno to be produced at relatively high levels in cells derived from renal or adrenal tissue. OP-1 proteins are a group of morphogenically active proteins. Morphogens are inactive when reduced, but are active as exidised homodimers and when exidised with other morphogens (e.g.
                    Bone morphogenetic protein-8; BMP-8; bone bone disorder; cartilage injury; therapy;
                                                                              Bone morphogenetic protein-7.
                                                                                                                      25-MAR-2003
10-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Screening for compounds which modulate morphogen expression - by incubating in the presence of epithelial cells which contain a cellular gene for morphogenic protein expression.
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                                                                                                                                                                                                                    AAW54064 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAT97877
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                                                                                                                                                                                                                                                                                                                     94
                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           139 AA;
                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oppermann H,
Smart JE;
                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                  (revised)
(first entry)
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91US-00752764.
91US-00752861.
92US-00938021.
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Pred. No. 6.1e-07;
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                      formation; cartilage formation; BMP-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kuberasampath T;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 139;
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RESULT 52
AAW84215
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This sequence is the bone morphogenetic protein-7 (BMP-7). A mutated version of the BMP-8 DNA sequence, encoding a protein having Ser-63 replaced with His, is the BMP-8 DNA sequence of the invention. Bone morphogenetic proteins are able to induce bone or cartilage formation and are expected to be useful for treating bone or cartilage injuries or disorders. Expression of the BMP-8 mutant DNA in bacterial cells yields
                                                                                                                                                                                                                                                                                                                                                                                                                             Proteinase site; bone morphogenetic fusion protein; bone binding bone morphogenetic protein; transforming growth factor beta; active fragment; wound healing; bone growth; purification tag.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     correctly folded BMP-2/8 heterodimers. (Updated on 25-MAR-2003 PR field.)
                                                                        (HALL/)
                                                                                                                                                                            03-JUN-1997;
                                                                                                                                                                                                                            02-JUN-1998;
                                                                                                                                                                                                                                                                                                                             W09855137-A1
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bone morphogenetic protein
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N-PSDB; AAV24033.
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15-NOV-1994;
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                        (HANB/)
                                                                                                                                                                                                                                                                               10-DEC-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding bone morphogenetic protein 8 mutant -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        мссоу J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAY-1998
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                                                                                                                        (NIMIN)
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                     HAN B.
SHORS E C.
                                                                     WU L.
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                                                                                                F L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                            97US-00868452
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94WO-US013181.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    active fragment.
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Pred. No. 6.1e-07;
; Mismatches 0;
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proteins of the invention. The bone morphogenetic fusion protein may contain some or all of the following elements: a purification tag, a proteinase site, an ECM/bone binding site, a second proteinase site, and a bone morphogenetic protein active fragment. The fusion proteins of the invention also includes proteins that have transforming growth factor beta active fragments instead of bone morphogenetic protein active fragments. The bone morphogenetic fusion proteins can be used for enhancing wound healing or bone growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New bone morphogenetic fusion proteins - comprising a purification and a bone morphogenetic active fragment, used for enhancing wound healing or bone growth.
                                                                                                                                                                                                                                                                                                                                                                                                     Cystic kidney disease; renal; therapeutic; osteogenic protein; OP bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence represents a bone morphogenetic protein active fragment, that was used in the creation of the bone morphogenetic fusion
The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic
                                                                                                      Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone
                                                                                                                                                   WPI; 1999-070084/06
                                                                                                                                                                                                                                          07-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                          uraemic
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                                                             Claim 4;
                                                                                           morphogenic
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                                                                                                                                                                                                                                                                                                                                                                                          medullary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 20
                                                           Page;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 113
                                                                                           encoding them, esplic protein family.
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteogenic protein 1 (OP1) (residues 293-431)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                 Harris
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                                                           67pp; English
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                                                                                                                                                                                                                                                                      98WO-US009268
                                                                                                                                                                                                                                                                                                                                                                                       cystic disease; human
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Pred. No. 6.1e-07;
Mismatches 0;
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    therapeutic therapeutic
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09-OCT-1998; 04-OCT-1999;

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RESULT 54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bone morphogenetic protein; BMP-7; human; MP52; TGF-beta superfamily; transforming growth factor-beta; antagonist; cytostatic; osteopathic; prevention; ossification; metabolic bone disease; calcification; bone therapy; tumour; cartilage; osteogenic; Paget's disease; screening; myositis ossificans; arterial sclerosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified-site
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                                                                                                                                                                     WO200021998-A1
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/label= Receptor_binding_site
/note= "Composed of two vicinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Met of mature human MP52
is replaced with Leu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= Receptor_binding_site
/note= "Composed of two vicinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                  /note= "Met of mature human is replaced with Val"
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Pred. No. 6.1e-07;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC belongs to the bone morphogenetic protein (BMP) family. Modification or CC replacement of Met at locations 30, 71, 74 and Trp at positions 32, 35 of CC the meature MPS2 protein to a hydrophilic or polar amino acid residue by CC chemical modification, yields a mature protein having an antagonistic CC activity against BMP. The modified sequence functions as an antagonist of CC bone morphogenetic activity, that has cytostatic and osteopathic CC activity. This antagonist is useful for prevention and therapy of ectopic CC saification or metabolic diseases with calcification. It is used for CC treatment of tumours in the bone and cartilage and metabolic bone CC diseases such as Paget's disease. It is effective in suppressing symptoms CC caused by stress of operation, traumatic myositis ossification of consification by defect of oxygen supply, osteogenic tumour and arterial CC sclerosis. It can be used as a reagent for screening agents which compete CC with BMP and for receptor binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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Matches 20
A biologically active TGF-beta family member fusion protein competent refold, comprising a C-terminal linked TGF-beta family protein.
                                                                                                                                              07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                             13-APR-2000
                                                                                                                                                                                                                                                                                                                          finger 2 subdomain; BMP; TGF-beta family; protein refolding; OP-1;
fusion protein; osteopathic; antibacterial; cytostatic; mutant.
                                                                                                                                                                                                                                                                                                                                                                                                          10-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY92594 standard; protein; 139 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bone morphogenetic protein antagonist useful for prevention and treatment of ectopic ossification and metabolic diseases with calcification, is obtained by chemical modification or genetic engineering.
                                                 WPI; 2000-303743/26.
                                                                                                                                                                                              07-OCT-1999;
                                                                                                                                                                                                                                                            WO200020449-A2
                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                          Mature mutant OP-1 construct H2223.
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY92594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 139 AA;
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                                                                                                               (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is the modified mature human BMP-7 protein.
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99US-00375333
                                                                                                                                                                                              99WO-US023372
                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                              Mccartney J;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 111; DB 3;
Pred. No. 6.1e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 139;
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RESULT 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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Matches 20
                             Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
                                                                                                                      WPI; 2000-303787/26
                                                                                                                                                                                                                          07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                  WO200020607-A2
                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-SEP-2000
                                                                                                                                                       Oppermann H,
                                                                                                                                                                                                                                                                              07-OCT-1999;
                                                                                                                                                                                                                                                                                                               13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mature OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB09547;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB09547 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 153; 160pp; English
                                                                                                                                                                                       (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mutant
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                                                                                                                                                       Tai M,
                                                                                                                                                                                                                          98US-0103418P
99US-00374958
                                                                                                                                                                                                                                                                              99WO-US023371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein H2223, SEQ ID NO:68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139
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Pred. No. 6.1e-07;
; Mismatches 0;
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Claim 51; Page 155; 162pp; English

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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Ile, Ser, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Ile, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Ile, Ser and Ala. In the finger 2 subdomain, such as the cateogenic proteins (Pse, Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include proteins (SPse), growth/differentiation factors (GDFs) and inhibins. CC Specific examples of TGF-beta superfamily mutants encompassed by the invention are the finger 2 subdomain mutants of human osteogenic protein-CC inducing tissue morphogenesis in bone, non-mineralised skeltal tissue, dental tissue, connective tissue, brain, liver and nerve tissue. The CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., igament, tendon, muscle, fibrocartilage, joint capsule and continuous inflammatory response-mediated tissue damage and scar tissue superfamily members, the mutants can be used to repair diseased or immune/inflammatory response-mediated tissue damage and scar tissue superfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-content-
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Best Local
                                                                                                                                                                                                        11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
30-AUG-1992;
28-AUG-1992;
20-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Morphogen; bone formation; modulation; endochondral; OP-1; OP-2; DPP; transforming growth factor; TGF-beta; osteogenic protein; BMP2; Vgr-1; GDF-1; 60A protein; screening assay; modulate; therapeutic; cell death
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human osteogenic protein (hOP-1) mature protein sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY57218 standard; protein; 139 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-AUG-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US5994131-A.
                                                                                  (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
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                                                                                                                                                           91US-00667274.
91US-00752764.
91US-00752861.
92US-00938021.
94US-00278729.
95US-00451953.
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Pred. No. 6.1e-07;
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RESULT 58
AAB02813
ID AAB02
XX AAB02
XX AAB02
XX Tunou
DE Human
XX Tunou
KW Done
KW tissu
XX Homo
OS Synth
XX W0200
XX W0200
XX W0200
XX II-AU
PR 11-AU
XX OFFER
PR 16-AU
XX O
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Matches 20
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                                         Oppermann
                                                                                                                               (STYC ) STRYKER CORP
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Matches

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a mammalian cell with a compound that modulates morphogen expression in cepithelial cells identified in an assay for bone formation. The method cuses a protein that induces endochondral bone formation such as OP-1, a morphogenic protein which is a member of the transforming growth factor (1967-beta) superfamily. Other morphogens useful in the invention are osteogenic proteins (OP-1, oP-2 and CBMP2) and related proteins such as DPP, Vgr-1, GDF-1 and the 60A protein. The method is used as a screening cassay for identifying compounds which modulate the level of expression of a morphogen. The method allows the determination of substances useful in therapeutic treatments to modulate (stimulate or depress) morphogen corporation of the expression in disease treatment. Compounds can be screened for their ability to modulate the effective systemic or local concentration of a morphogen. Compounds which can be screened include chemicals, biological response molecules such as lymphokines, cytokines, formounes or vitamins, plant extracts, microbial broths and extract. The assay has few steps and is easy to carry out producing results conjuckly. Drugs which result in cell death are easy to identify. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Screening assay useful modulate expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Col 35-36; 48pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a morphogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for identifying compounds which a morphogen in a mammalian cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      can
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a morphogen in
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Tumour growth factor beta; TGF-beta; morphogenic protein; BMP; OP; bone morphogenic protein; osteogenic protein; mutant; modified; finger 2 sub-domain; finger 1 domain; heel domain; chimeric protein osteogenic; proliferative; antiinflammatory; tissue morphogenesis; tissue repair; regeneration; proliferation; differentiation.
07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                           22-AUG-2000
                                                          07-OCT-1999;
                                                                                             13-APR-2000.
                                                                                                                                    WO200020591-A2
                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                    Human mature H2223 mutant amino acid sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB02813 standard; protein;
                                                                                                                                                                                              sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
98US-0103418P.
99US-00374936.
                                                          99WO-US023370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 3; 100.0%; Pred. No. 6.1e-07; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       113
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RESULT 57
AAXY57218
IID AAXY57
XX AAY57
XX AAY57
XX AAY57
XX AAY57
XX Humar
XX Morph
COS Homo
XX GDF-1
XX US599
XX US599
XX 11-AU
PR 30-AU

JΕ,

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Kuberasampath

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Rueger DC,

Pang

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Tai M,

Mccartney J;

Homo

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RESULT 59
AAM/51924
ID AAM/51
XX AAM/51
XX AAM/51
XX AAM/51
XX AAM/51
XX Humar
XX Humar
XX Homo
XX Homo
XX Homo
XX Homo
XX ACC
PN DE100
XX BO-NI
XX ACC
PN Sebal
XX WPI;
XX WPI;
XX New n
PT for t
PT recet
XX New n
PT recet
XX Sebal
XX New n
PT for t
PT recet
XX Sebal
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a tumour growth factor beta (TGF-beta) superfamily chimeric protein (I) derived from at least 2 different members of the superfamily comprising a dimer with one monomer that contains a finger 2 domain derived from a first family member and a finger 1 domain and heel domain, both derived from a second family member. The monomer further comprises a conserved C-terminal cysteine skeleton. (I) has osteogenic, proliferative and antiinflammatory activities. The TGF-beta superfamily chimeric proteins (I) are useful for inducing tissue morphogenesis (i.e. molecules capable of tissue repair and regeneration and/or inhibiting inflammation) in bone, non-mineralised skeletal tissue, dental tissue, connective tissue, brain, liver and nerve and for inducing the proliferation and afferentiation of uncommitted progenitor cells in a tissue-specific manner to support new tissue formation. AAA29887 to AAA29887 and AAB02748 to AAB02824 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one monomer containing domains from two family members.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; TGFbeta; transforming growth factor beta; mutant; antagonist; agonist; ectopic bone formation; psoriasis; muscular atrophy; scar; formation, fibrosis; cirrhosis; osteopathic; antipsoriatic; antifibro hepatotropic; vulnerary; BMP7.
                                                                                                                                 New mutein of transforming for treating or preventing
                                                                                                                                                                                                              WPI; 2002-042559/06
                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2000; 2000DE-01026713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human TGFbeta protein superfamily protein BMP7.
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                                                 Example 1; Fig 1; 54pp;
                                                                                                        receptor binding.
                                                                                                                                                                                                                                                                Sebald W,
                                                                                                                                                                                                                                                                                                                                                                                                                        30-MAY-2000; 2000DE-01026713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DE10026713-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequences used in the exemplification of the present invention
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                                                                                                                                                                                                                                                             Nickel J;
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                                                       German.
                                                                                                                            growth factor-beta e.g. ectopic bone f
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Pred. No. 6.1e-07;
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                                                                                                                                    formation,
                                                                                                                                                       superfamily protein,
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                                                                                     The invention relates to a novel human polynucleotide and the encoded polypeptide. A polynucleotide of the invention may have a use in gene therapy. An oligonucleotide of the invention ADM05202-ADM06773 is useful as a primer for synthesizing the polynucleotide or as a probe for detecting the polynucleotide or as a probe for useful in gene therapy, for developing a diagnostic marker or medialines for regulating their expression and activity, or as a target of gene therapy. The proteins ADM0759-ADM06201 encoded by the polynucleotides are useful as pharmaceutical agents. The present sequence represents a protein sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          when in the form of a homodimer, has antagonistic or partial agonistic activity, and where the mutation results in the protein binding with low affinity to its receptor. The protein is a member of the transforming growth factor beta (TGFbeta) superfamily. The mutant sequences of the invention can be used in the treatment of diseases associated with the overexpression of TGFbeta family proteins, including ectopic bone formation, psoriasis, muscular atrophy, scar formation, fibrosis and cirrhosis. The present sequence is the human BMP7 protein
                                                                                                                                                                                                                                                                                         New polynucleotides and polypeptides are useful in gene therapy, developing a diagnostic marker or medicines for regulating their expression and activity, or as a target of gene therapy.
                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-723558/69.
N-PSDB; ADM01655.
                                                           Sequence
                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 2783; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                       Seki N,
                                                                                                                                                                                                                                                                                                                                                                                                                                     Isogai T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; gene therapy; diagnostic marker; pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-MAR-2002; 2002JP-00137785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2002; 2002EP-00008400
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                                                                                                                                                                                                                                                                                                                                                                                                                        Yamamoto
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, Isono Y,
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Conservative
100.0%; llarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention
                                                                                                                                                                                                                                                                                                                                                                                                    Otsuki T, Wakamatsu A,
Hio Y, Otsuka K, Nagai
Otsuka M, Nagahari K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
Score 111; DB 7;
Pred. No. 6.1e-07;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO:2783
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K, Irie
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The invention relates to human bone morphogenic protein (BMP) polypeptides and the polynucleotides encoding them. The invention also crelates to a method for limiting weight gain, suppressing appetite or reducing fat mass, comprising administering to a mammalian subject a cherapeutic amount of a BMP polypeptide, and a method for increasing the sensitivity of a cell to insulin or increasing glucose uptake by a cell, comprising contacting the cell with a BMP polypeptide. The BMP colypeptides and polynucleotides are useful for diagnosing a pathological condition or a susceptibility to a pathological condition or a susceptibility to a pathological condition, e.g. diabetes, insulin resistance, hyperglycaemia, hypertension, coronary cartery disease, renal failure, neuropathy, metabolic disorders, glucose metabolism disorder, endocrine disorders, obesity, weight loss, liver colioroters, cartilage and bone growth disorders, inflammation or aberrant coloroters, cartilage and bone growth disorders, inflammation or aberrant coloroters, cartilage and sliver cancer. The BMP polypeptides and partitioning, increasing appetite, reducing fat mass, increasing
                     ARBSULT 62

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888
             This invention relates to a novel method for treating or preventing chronic renal failure and other associated mammalian renal disorders. Specifically, it refers to cojointly administering osteogenic protein. (OP) or bone morphogenetic protein (BMP) morphogens with an angiotensin-cc converting enzyme (ACE) inhibitor, in particular the angiotensin II converting enzyme (ACE) inhibitor, in particular the angiotensin II converting enzyme (ACE) inhibitor, in particular the angiotensin II converting enzyme (ACE) inhibitor, in particular the angiotensin II converting these compositions as inducers of proliferation and differentiation of renal tissue, and as such can be used to prevent, inhibit, delay or consiste the progressive loss of renal function and the decline in confident that the progressive loss of renal function and the decline in confident that the colline in confidency is they can be useful for treating conditions such as end-stage confidency in the confidency of the confidency is a confidency in the confidency of the confidency is a confidency of the c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating or preventing chronic renal failure in mammal, comprises conjointly administering osteogenic proteins/bone morphogenetic pmorphogen and angiotensin-converting enzyme inhibitor to mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chronic diabetic nephropathy; diabetic glomerulopathy; diabetic renal hypertrophy; hypertensive nephrosclerosis; hypertensive glomerulonephritis; hypertensive glomerulonephritis; hypertensive glomerulonephritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bone morphogenetic protein; BMP; morphogen; angiotensin-converting enzyme inhibitor; ACE; angiotensin II receptor antagonist; AIIRA; en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic protein 1 morphogen SeqID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 1; 365pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-AUG-2002; 2002US-0406431P
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l. This sequence represents a human BMP polypeptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2004-282635/26
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Pred. No. 6.1e-07;
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New bone morphogenic protein polypeptides and polynucleotides, useful diagnosing, preventing, treating or ameliorating a medical condition, e.g. diabetes, dyslipidemia, hypertension, coronary artery disease or

for

Claim 1; SEQ

ID NO 63; 224pp; English

WPI;

2004-022075/02

Bunox (RUBE/) (\NOON) 16-JAN-2003;

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YOUNG RUBEN

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23-MAR-2001; 2001WO-US009229.
17-JAN-2002; 2002US-0348621P.
22-JAN-2002; 2002US-0349366P.
28-JAN-2002; 2002US-0351520P.
06-FEB-2002; 2002US-0354265P.
15-FEB-2002; 2002US-0356749P.

17-MAR-2000; 2 16-MAR-2001; 2 23-MAR-2001; 2 17-JAN-2002; 2

2000US-0190067P 2001US-00809269

04-DEC-2003.

US2003224501-A1 Homo sapiens

14-FEB-2003; 2003US-00366345

Human; bone morphogenic protein; BMP; weight gain; appetite suppression; fat mass reduction; cell sensitivity; glucose uptake; diabetes; insulin resistance; hyperglycaemia; hypertension; coronary artery disease; renal failure; neuropathy; metabolic disorder; glucose metabolism disorder; endocrine disorder; obesity; weight loss; liver disorder; cartilage growth disorder; bone growth disorder; inflammation; aberrant cell growth; liver cancer.

Human bone morphogenic protein (BMP) polypeptide #35

11-MAR-2004

(first

ADH11607 standard; protein; 139

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RESULT 64
AAW29295
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AC AAW29
AC AAW29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiinflammatory and vasotropic activities. This polypeptide sequence a human osteogenic protein 1 of the invention.
  Human osteogenic protein subunit D linked to pel B protein product
                        20-APR-1998
                                                                   AAW29295 standard; protein; 161
                                                                                                                                                                                                                                        The present invention relates to preparing recombinant human bone morphogenetic protein-7 mature peptide dimer. The present sequence represents rh BMP-7 mature peptide.
                                                                                                                                                                                                                                                                                                         Method for preparing recombinant human bone morphogenetic protein-7 mature peptide dimer.
                                                                                                                                                                                                                                                                                                                                                                                                                                               12-OCT-2001; 2001CN-00135658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CN1412200-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rh BMP-7 mature peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADK72628 standard; protein; 141 AA
                                             AAW29295;
                                                                                                                                                                                                                   Sequence 141 AA;
                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 2; 11pp; Chinese.
                                                                                                                                                                                                                                                                                                                                            N-PSDB; ADK72627.
                                                                                                                                                                                                                                                                                                                                                                              Xu F,
                                                                                                                                                                                                                                                                                                                                                                                                                         12-OCT-2001; 2001CN-00135658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rh BMP-7 mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADK72628;
                                                                                                                                                                                                                                                                                                                                                                                                   (GENE-) INST GENE TECHNOLOGY HANGZHOU HUADONG ME
                                                                                                                                                                                                                                                                                                                                                       2004-000155/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bone morphogenetic protein-7
                                                                                                                          95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                      l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                            Zheng Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           l Similarity
20; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 113
                                                                                                                          INPETVPKPCCAPTQLNAIS 114
                                                                                                                                                                      100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
ilarity 100.0%;
Conservative 0
                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide.
                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                 Score 111; DB 8;
Pred. No. 6.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 8;
Pred. No. 6.1e-07;
                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide dimer;
                                                                                                                                                                                                                                                    The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                             Length 141;
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                                                                                                                                                                        Indels
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RESULT 65
AAB18757
ID AAB18
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                                                                                                                                                                                                                                                                                                                                                                                                                                         CC A new recombinant DNA vector construct has been developed which encodes a Cf fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site clocated between (a) and (b). The present sequence represents a human costeogenic protein subunit D linked to pel B protein product, used in an example in the present invention. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, neutralising their effects. The peptides have further been shown to inhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteenlysis, and in some cases are actually secreted from the host cells. This allows the indirect production of antivoval.
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 20
Synthetic
                            Fusion protein expression; bactericidal permeability-increasing protein; \mathtt{BPI}; antimicrobial; endotoxin binding agent; neutralizing agent; subunit D; osteogenic protein.
                                                                                              Subunit D of human osteogenic protein linked to a pelB leader sequence.
                                                                                                                                                                                                AAB18757 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 161 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant production of bactericidal/permeability increasing protein -by expression as a fusion protein in microbial host cells, then cleaving the BPI peptide from the carrier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-480215/44.
N-PSDB; AAT86333.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic Pectobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angiogenesis; fungicidal; recombinant DNA; vector.
                                                                                                                                 22-JAN-2001
                                                                                                                                                                   AAB18757;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 146-147; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Better MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (XOMA) XOMA
                                                                                                                                                                                                                                                                                                                                              / Match 100.0%;
Local Similarity 100.0%;
les 20; Conservative (
                                                                                                                                                                                                                                                                                   116
                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                               INPETVEKECCAPTOLNAIS 20
                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  carotovorum.
                                                                                                                                                                                                protein; 161
                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                  Score 111; DB 2;
Pred. No. 7.1e-07;
                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                                                                 Length 161;
                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                                                                                                                                                                                                    Gaps
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Key Peptide

Homo

sapiens.

Protein

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The specification describes an improved method for obtaining a peptide from bacterial cells after fusion protein expression in the cells. The method comprises treating the bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein, in a single step. The fusion protein comprises the peptide, and a carrier protein, with an acid-cleavable site between them. The method is useful for obtaining recombinant peptides such as bactericidal permeability-increasing protein (BPI)-derived peptides from bacterial cells. BPI-derived peptides having the activity of BPI are useful as antimicrobial agents, as endotoxin binding and neutralizing agents. The present sequence represents subunit D of a human osteogenic protein. It is linked to a peptide derived from BPI, and the construct used to produce vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Improved production of recombinant peptides from bacterial cells involves treating bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein.
                                             Osteogenic protein; bone; cartilage; matrix; osteoarthritis; vascularisation; mineralisation; differentiation; ss.
                                                                                                                                                                                                                     AAR44749 standard; protein; 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 38-39; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; AAA75797.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (XOMA ) XOMA TECHNOLOGY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-2000; 2000WO-US007148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pectobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                            for use in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000-602118/57.
                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                            fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gavit PD;
                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                        (revised)
(revised)
(first en
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "pelB leader sequence
of Erwinia carotovora"
23. .161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "subunit D of
                                                                                          protein
                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                            OP1A.
                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                              Score 111; DB 3;
Pred: No. 7.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human osteogenic protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     from the
                                                                                                                                                                                                                                                                                                                                                                                             Length 161;
                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                0
                                                            repair;
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                0
RESULT 67
AAR85765
ID AAR85
XX
AC AAR85
XX
DT 25-MA
DT 20-JU
XX
OP1A
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                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                              The fusion protein comprises substantially all of the mature form of OP1 (AAR44746, residues 326-431) linked by an Asp-Pro cleavage site to a leader sequence suitable for promoting expression in E. coli. The protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteograthmitis. (Updated on 01-JUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
 OP1A fusion
                                                                                                                                                                                                                                                                                                                 Sequence 169 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1993-395405/49.
N-PSDB; AAQ53145.
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                              25-MAR-2003
20-JUN-1996
                                                                              AAR85765;
                                                                                                             AAR85765 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Col 99-100; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-1990;
22-FEB-1991;
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21-NOV-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-1990
                                                                                                                                                                                       124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                              u 100.0%;
Similarity 100.0%;
20; Conservative 0;
 protein
                               (revised)
(first en
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90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
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89US-00422699.
90US-00483913.
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91US-00660162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label= Leader sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "Substantial fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ozkaynak
                                                                                                             protein;
   encoded
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                               entry)
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Pred. No. 7.4e-07;
Mismatches 0;
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   OP1 (a)
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   CDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the OP1 mature
                                                                                                                                                                                                                                                                                   Length 169;
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Better MD,

18-MAR-1999;

21-SEP-2000 WO200055322-A1

RESULT 66
AAR44749
ID AAR447
XX AAR44
XX AAR44
XX AAR44
XX AAR44
XX AAR44
XX AAR44
XX AAR46
DT 06-JU
XX OStec
XW Ostec
XX Ostec
XX AAR46
XX AAR46
XX AAR46
XX AAR46
XX AAR66
X

Osteogenic

sapiens

25-MAR-2003 01-JUL-2002 06-JUN-1994

AAR44749;

밁 S

116 \vdash 20;

0

Matches

Local

Sequence 161

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The sequences given in AAR85765-70 represent fusion proteins comprising CC fragments of human osteogenic proteins. The MLE leader sequence is CC suitable for promoting expression in E. coli. The genes were expressed in E. coli under the control of a synthetic Trp promoter-operator to produce Synthetic inclusion bodies. Constructs containing the Asp-Pro site were CC eleaved with acid. The resulting products were purified, refolded and CC allowed to dimerise. The proteins had osteogenic activity when properly folded and dimerised. Antisera were produced against the purified CC folded and dimerised. Antisera were produced against the purified CC osteogenic proteins. The antibodies had binding specificities for CC to an epitope of the osteogenic proteins and may be used in purification CC protocols. Osteogenic proteins, such as these, may be used in an CC correct acquired and congenital cranofacial and other skeletal or dental CC anomalies. They may be used to induce local endochrondral bone formation firactures and in other clinical applications is required.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacial; anomaly; skeletal; dental; endochrondral bone formation; MLE leader; non-union fracture; cartilage repair; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cleavage-site
                                                                                                                                                                                                                                                                                            Antibodies with osteogenic protein binding specificity - used in purification of osteogenic proteins, and as antigenic proteins.
                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAT02605.
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15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                  Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-FEB-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-SEP-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                    1996-010159/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                  bc,
                                                                                                                                                                                                                                                                                                                                                                                                            STRYKER CORP.
                                                                                                                                                                                                                                                                  CoL
                                                                                                                                                                                                                                                                                                                                                                                  Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                       90US-00599543.
90US-00600024.
90US-006216374.
90US-00621849.
90US-00621988.
91US-00660162.
91US-00860162.
92US-00841646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89US-00315342.
89US-00422613.
89US-00422699.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88US-00232630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93US-00147023
                                                                                                                                                                                                                                                                99-100; 129pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "Asp-Pro acid cleavage site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "MLE leader peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note= "Probably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3-00569920.

3-00579865.

3-00599543.

3-00600024.

3-00616374.

3-00621849.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -00422613.
-00422699.
-00483913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Residues 326-431 of hOP-1"
                                                                                                                                                                                                                                                                                                                                                                                H
                                                                                                                                                                                                                                                                                                                                                                                  Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      included
                                                                                                                                                                                                                                                                                                                                                                                  Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      due to a cloning
                                                                                                                                                                                                                                                                                                                                                                                  Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        anomaly"
                                                                                                                                                                                        to produce
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RESULT 68
AAW44305
ADW444305
AC AAW44
XX AAW44
XX AAW44
XX AAW44
XX Human
XX Human
XX Human
XX Human
XX Human
XX Homo
PR 23-PF
PF 23-PF
PF 23-PF
PF 23-PF
PF 17-OC
PR 17-OC
PR 17-OC
PR 17-OC
PR 18-OI
PR 20-AI
PR 20-BI
PR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                              for novel protein(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Other potential applications include cartilage repair, treatment of osteoarthritis. (Updated on 25-MAR-2003 to field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-NOV-1990;
04-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-AUG-1988
23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human osteogenic fusion protein OPIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                             Extraction of osteogenic protein from mixture - u for novel polypeptide chains useful as subunit(s)
                                                                                                                                                                                                                              N-PSDB; AAV15208.
                                                                                                                                                                                                                                                  WPI; 1998-158353/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-SEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-OCT-1989
17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5714589-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dimeric; recombinant protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; osteogenic fusion protein; subunit; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW44305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW44305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-FEB-1990
                                                                                                                                                                                                                                                                                                                                   STYC )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                                                                                   STRYKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 169 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                         Rueger DC,
                                                                                                      Col
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry
                                                                                                                                                                                                                                                                                                                                                                        92US-00827052.
92US-00841646.
93US-00147023.
                                                                                                                                                                                                                                                                                                                                                                                                                                   90US-00621849.
90US-00621988.
91US-00660162.
91US-00810560.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -SU88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89US-00315342.
89US-00422613.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-00447570
                                                                                                      97-98;
                                                                                                                                                                                                                                                                                                                                   CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3-00422699.

3-00483913.

3-00569920.

3-00579865.

3-00599543.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                      127pp; English
                                                                                                                                                                                                                                                                                            Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 2;
Pred. No. 7.4e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                              Η,
                                                                                                                                                                                                                                                                                         Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                   using antibodies specific s) of dimeric osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 169;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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The present sequence represents a human osteogenic fusion protein, which is used in the present invention. The present invention describes methods for selectively extracting an osteogenic protein (OP) from a mixture. The method comprises: (a) exposing the mixture to an antibody that

Disclosure;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                   08-APR-1988
15-AUG-1988
23-FEB-1989
17-OCT-1989
17-OCT-1989
22-FEB-1990
20-AUG-1990
20-AUG-1990
18-OCT-1990
18-OCT-1990
04-DEC-1990
04-DEC-1990
04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  specifically binds OP, separating the resulting antibody-protein complex from the mixture, and dissociating the complex. In the methods OP comprises a pair of oxidised subunits that are disulphide-bonded to form a dimer, and one of the subunits has an amino acid (aa) sequence sufficiently homologous to residues 335-431 of a 431 aa protein designated OPS, sequence given in the specification. In dimeric form OP is capable of inducing cartilage and endochondral bone formation in a mammal when disposed within a matrix implanted in the mammal. The methods are used for recovering the recombinant proteins from cell cultures
                                                                                                       20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                       cartilage;
non-union 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAR-2003
24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 169
                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW89682 standard; protein; 169 AA
                                                                                                                                                                                                                                                                                                  23-MAY-1995;
                                                                                                                                                                                                                                                                                                                      26-JAN-1999
                                                                                                                                                                                                                                                                                                                                          US5863758-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW89682
                                                                          (STYC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                   RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                            osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                          STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                           fracture; osteoart
ow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                   craniofacial
                                                                                                                                                                                                                                                                                                                                                                                                                                                 fusion
                                                    Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
                                                                                            90US-00579865.
90US-0059543.
90US-00600024.
90US-00616374.
90US-00621984.
90US-00660162.
91US-00660162.
91US-00810560.
92US-00810560.
92US-00841646.
93US-00147023.
                                                                                                                                                                                                                                                       88US-00179406.
88US-00232630.
89US-00315342.
                                                                                                                                                                                                               89US-00422613.
89US-00422699.
90US-00483913.
90US-00569920.
                                                                                                                                                                                                                                                                                                  95US-00449700
                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                  protein; OP-1; OPX; endochondral bone formation;
facial defect; skeletal disorder; dental disorder;
                                                                                                                                                                                                                                                                                                                                                                                                       osteoarthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                      Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                  OP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 2;
Pred. No. 7.4e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                         vascularisation;
                                                      Ή
                                                      Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                      Ξ
                                                                                                                                                                                                                                                                                                                                                                                                         mineralisation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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to induce cartilage and bone formation when implanted in matrix, useful
     for
repairing bone
     defects.
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Disclosure; Col 97-98; 127pp; English

The present invention describes isolated DNA (I) encoding at least one costeogenically active region of human osteogenic protein-1 in prepro form (OP1-PP), murine OP1-PP, murine OP2-PP or human OP2-PP. Also described care: (A) DNA related to (I) encoding a polypeptide able to form dimers chart can induce cartilage and endochondral bone formation in a mammal combined in a matrix; (B) vectors containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a prepro- or pro-DP1, and related vectors and transformed cells; (E) costeogenic protein (II) produced by expression of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OP1 costeogenic protein (II) production of an active openic composition by truncating mature OP1 protein Host cells of (C) are used to produce by truncating mature OP1 protein Host cells of (C) are used to produce composition of acquired or congenital craniforacial defects or other skeletal or confidence of the confidence cartilage and bone formation, e.g. for correction of acquired or congenital craniforacial defects or other skeletal or constens induce complete development of endochondral bone, including crasent sequence represents an osteogenic fusion OP1A. (Updated CC protein fractures and bone marrow differentiation. The correct PA field.) form

Sequence 169

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Query Match
Best Local S
Matches 20
ll Similarity
20; Conserv
100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 7.4e-07; Conservative 0; Mismatches 0;
                         Length
    Indels
  0
  Gaps
     0
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124
               H
INPETVPKPCCAPTQLNAIS
            INPETVPKPCCAPTQLNAIS
143
               20
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standard; protein; 169

AAY43116;

16-DEC-1999 (first entry)

Osteogenic protein OPIA fusion protein sequence.

Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage formatiallogenic implant; xenogenic implant; endochondral bone formation; osteogenic protein. formation;

Synthetic US5958441-A

RESULT 70

AAY43116

ID AAY4313

XX AAY43

AC AAY43

XX OStec

XX Chond

KW Cell

KW Cell

KW Cell

KW OStec

XX OStes

XX OSTes

XX OSTes

PD 28-SI

XX OS-AI

PR 115-AI

PR 117-OO

PR 118-OO

PR 118-OO

PR 21-NI

P 15-AUG-1988; 23-FEB-1989; 17-OCT-1989; 17-OCT-1989; 18-OCT-1990; 07-SEP-1990; 22-FEB-1990; 20-AUG-1990; 08-APR-1988; 24-MAY-1995; 28-SEP-1999 88US-00179406. 88US-00232630. 89US-00315342. 90US-00599543. 90US-00600024. 90US-00616374. 90US-00569920. 90US-00579865. 89US-00422613. 89US-00422699. 95US-00449699. 90US-00483913.

Nucleic acid encoding mammalian osteogenic proteins 'n prepro form

able

N-PSDB;

AAX00233

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RESULT 71
ADJ62684
ID ADJ67
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
                                    23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JAN-1992;
21-FEB-1992;
22-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence is an osteogenic protein IA (OPIA) fusion protein. The invention relates to a device for implantation in a mammal comprising a chondrogenic protein (I) dispersed within a biocompatible, in vivo degradable matrix defining pores which permits the influx, proliferation and differentiation of migratory progenitor cells, where (I) comprises a substantially pure protein with the amino acid sequence VPKPCCAPT, which is capable of inducing cartilage formation. The device is used as an allogenic or xenogenic implant for the induction endochondral bone formation in mammals
                                                                                   08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                      endochondral bone vascularisation; m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Implant for mammals permitting the influx, proliferation and differentiation of migratory progenitor cells, useful for inducing endochondral bone formation in mammals.
                                                                                                                        04-SEP-1998;
                                                                                                                                                                       US6551995-B1
                                                                                                                                                                                                                                                                                                                                              ADJ62684 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                22-APR-2003
                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                             human; osteogenic
                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                               06-MAY-2004
                                                                                                                                                                                                                                                                                                                      ADJ62684;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (STYC ) STRYKER BIOTECH CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
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DB; AAZ27584.
                                                                                                                                                                                                                                                                                                                                                                                                         124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                     osteogenic protein 1A,
                                                                                                                                                                                                                                                                                                                                                                                                                                 \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                       th 100.0%; Similarity 100.0%; 20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        169
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĀĀ;
                                                                                                                                                                                                                                                                                              (first entry)
          89US-00422613.
89US-00422623.
89US-00422699.
90US-00483913.
90US-00569920.
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91US-00660162.
91US-00810560.
92US-00827052.
92US-00827052.
92US-00841646.
92US-00995345.
93US-00147023.
                                                                                   88US-00232630
                                                                                                 88US-00179406
                                                                                                                       98US-00148925
                                                                        89US-00315342.
                                                                                                                                                                                                                     c protein 1; OP1A; osteogenic device;
e formation; bone repair; cartilage repair;
mineralisation; bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                            protein; 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                        °,
                                                                                                                                                                                                                                                                      OP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 2;
Pred. No. 7.4e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                             The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammal. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammal in body. The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of human osteogenic protein 1A, OP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 9; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    Osteogenic device useful for inducing endochondral bone formation in mammals, comprises ceramic or biodegradable non-collagen polymer matrix containing substantially pure natural-sourced mammalian osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (STYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003-575998/54
 124
                                                          20;
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                                                                          Similarity
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                      INPETVPKPCCAPTQLNAIS
INPETVPKPCCAPTQLNAIS
                                                            Conservative
                                                                                                                     AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00661988.
91US-00660162.
91US-00810560.
92US-00810560.
92US-00810560.
92US-00847052.
92US-004164.
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                                                                         100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kuberasampath T,
                                                            0
                                                                         Score 111; DB 7;
Pred. No. 7.4e-07;
   143
                              20
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rueger DC,
                                                             0
                                                                                        Length
                                                             Indels
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                                                             Gaps
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Homo sapiens.
Escherichia c
                                                                              Human; osteogenic endochondral bone
                                                                                                       Human osteogenic protein,
                                                    Chimeric
                                                                    cartilage repair;
                                                                                                                        29-JAN-2004 (first entry
                                                                                                                                                          ADE52755
                                                                                                                                                         standard; protein; 169
                                                                     dental reconstructive procedure
                                                                              protein; OP1; formation; car
                                                                                                       OPIA fusion.
                                                                             P1; CBMP2A; CBMP2B; osteogenic device;
cartilage formation; non-union fractu
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10-APR-2003 US2003069401-A1

coli.

20-AUG-1990; 18-OCT-1990; 18-OCT-1990; 21-NOV-1990; 04-DEC-1990;

04-DEC-22-FEB-20-DEC-

1991

28-JAN-21-FEB-

(OPPE/)
(OZKA/)
(KUBE/)
(RUEG/)

OPPERMANN OZKAYNAK E

ы н

biocompatible matrix; rtilage formation;

KUBERASAMPATH RUEGER D C. PANG R H L.

Oppermann H,

Ozkaynak

2004-008898/01

ADE52754.

08-APR-1988 15-AUG-1988 13-FEB-1989; 17-OCT-1989; 17-OCT-1989; 22-FEB-1990;

24-OCT-1997;

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DNA SEQ

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number where they really mean

169

0

Gaps

0

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Commandal, comprising obtained protein (OP) dispersed within a biocompatible, in vivo biodegradable matrix, where OP comprises a pair (CC (P)) of unglycosylated protein chains disulphide bonded to produce dimeric gedles having a conformation so that (P) is capable of inducing a coessible to the cells. Also included are substantially a pure mammal and capable of inducing a pair of unglycosylated polypeptide comparises and capable of inducing endochondral bone formation in amammal, where the osteogenic protein (comprising a pair of unglycosylated polypeptide comparises peptides derived from human or mouse OP1), a DNA sequence comparises peptides derived from human or mouse OP1), a DNA sequence command. A vector comprising the DNA, a host cell harbouring and capable of inducing endochondral bone formation in a comparise subunit of a dimeric osteogenic protein as defined above costeogenic device is useful for inducing local artilage and capable of submiding specifically to an epitope on the osteogenic proteins. The costeogenic device is useful for inducing local cartilage and bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for inducing endochondral bone formation in a mammal, for inducing cartilage repair in a mammal, in periodontal or dental reconstructive procedures, or in endochondral bone formation in a mammal, for inducing endochondral bone formation in a mammal, for inducing cartilage repair in a mammal, in the osteogenic protein are useful for artilage repair in a mammal, in costeogenic protein sare useful for artilage repair in a mammal, in the osteogenic protein are useful to raise monoclonal are polyclonal costeogenic protein with an E. coli leader sequence for heterologous expression. Note: The colaims refer to regions of mouse and the formation are formational in the osteogenic device, which are functional in the osteogenic device, human osteogenic device, which are functional in the osteogenic device, human osteogenic device, which are functional in the os
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                osteogenic protein comprising a pair disulfide bonded to produce dimeric biocompatible matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osteogenic device for inducing endochondral bone formation, has osteogenic protein comprising a pair of unglycosylated protein chains disulfide bonded to produce dimeric species, dispersed within
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention relates to an osteogenic device
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88US-00179406
88US-003263
89US-00325342
89US-00422613
89US-0042269
90US-00483913
90US-00483913
90US-0060024
90US-00616374
90US-00621988
91US-0060162
92US-00650162
92US-00841646
92US-00841646
92US-009345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Н
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Best Local (
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01-NOV-1993;
24-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-APR-1988;
15-AUG-1988;
28-JAN-1992;
           The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein dispersed within biocompatible matrix defining pores, differentiation, and proliferation of migratory progenitor cells from body of mammal, improvement where osteogenic protein comprises pair of unglycosylated protein chains disulfile bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a non-union fracture in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage repair in a mammal, for inducing cartilage cartilage or endochondral bone reconstructive procedures. The device is useful for inducing cartilage or endochondral bone formation in a mammal at a locus accessible to migratory progenitor cells. The device is useful for inducing local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             endochondral bone formation periodontal reconstructive cartilage repair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               however the authors refer to to refer to a protein.
                                                                                                                                                                                                                                                                                                                                                                                        Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chalns, inducing endochor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human osteogenic protein,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Opperman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; osteogenic
                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (STYC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-DEC-2002;
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DB; ADM80492.
                                                                                                                                                                                                                                                                                                                                                                      formation.
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lilarity 100.
Conservative
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93US-00147023.
95US-00449699.
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98US-00148925.
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92US-00827052.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       device; osteogenic protein; OPIA; biocom; formation; non-union fracture; cartilage
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                                                                                                                                                                                                                                                                                                                              136pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      procedure;
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Pred. No. 7.4e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dental reconstructive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -3
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2
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protein | endochondral

Disclosure; biocompatible

SEQ ID NO

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RESULT 74
AAB18759
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Best Local S
Matches 20
        The specification describes an improved method for obtaining a peptide from bacterial cells after fusion protein expression in the cells. The method comprises treating the bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein, in a single step. The fusion protein comprises the peptide, and a carrier protein, step. The fusion protein comprises the peptide, and a carrier protein,
                                                                                                                             Improved treating
                                                                                                                                                                    WPI; 2000-602118/57
N-PSDB; AAA75798.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cartilage bone formation and endochondral bone formation in a non-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein is useful for selectively extracting osteogenic protein from a mixture of molecules. The present sequence represents the amino acid sequence of the human osteogenic protein, OPIA.
                                                                                       Example 1; Page 41-42; 53pp; English
                                                                                                                                                                                                                                                             18-MAR-1999;
                                                                                                                                                                                                                                                                                      17-MAR-2000; 2000WO-US007148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Нопо
                                                                                                                                                                                                                                                                                                                21-SEP-2000
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                                                                                                                                                                                                                                                                                                                                                                                Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusion protein expression; bactericidal permeability-increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB18759 standard; protein; 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 169 AA;
                                                                                                                                                                                                                                    (XOMA)
                                                                                                                                                                                                                                                                                                                                                                                                       Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide
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an acid-cleavable site between them.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of subunit D
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                                                                                                                                                                                                                                    XOMA TECHNOLOGY LTD
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                                                                                                              production of recombinant peptides from bacterial cells involves bacterial cells with acid to disrupt or lyse the cells and the peptide from fusion protein.
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of Erwinia carotovora"
23, .161
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167. .1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            endotoxin binding agent; neutralizing agent ic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of human osteogenic protein and BPI peptide
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Pred. No. 7.4e-07;
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method is useful
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A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein from pIN03355 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin neutralising their effects. The peptides have further been shown to inhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteolysis, and in some cases are actually secreted from the host cells. This allows the indirect production of anti-microbial BPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            obtaining recombinant peptides such as bactericidal permeability-increasing protein (BPI)-derived peptides from bacterial cells. BPI-derived peptides from the activity of BPI are useful as antimicrobial agents, as endotoxin binding and neutralizing agents. The present sequence represents fusion protein, comprising subunit D of a human osteogenic protein and a human BPI derived peptide. The construct is used to produce vectors for use in the method of the invention
                                                                                                                                                                                                                                                                                          Recombinant production of bactericidal/permeability increasing pay expression as a fusion protein in microbial host cells, then the BPI peptide from the carrier.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      bacterial infection; fungal infection; fungicidal; recombinant DNA; vector.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pING3355 vector construct BPI peptide fusion protein Ser153(BPI).
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DB; AAT86335.
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Pred. No. 7.8e-07;
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RESULT 76
      GC A new recombinant DNA vector construct has been developed which encodes a CC fusion protein and is suitable for introduction into a bacterial host. CC The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein from pING3356 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, neutralising their effects. The peptides have further been shown to conhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without chost cells. This allows the indirect production of anti-microbial BPI peptides in microbial hosts. N.B. The present sequence is not shown in the specification but is derived from SEQ ID NO:257 on pages 158-159, as designated on page 23
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                                                                                                                                                                                                                                                                                                                        Recombinant production of bactericidal/permeability increasing protein -
by expression as a fusion protein in microbial host cells, then cleaving
the BPI peptide from the carrier.
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N-PSDB; AAT86335.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bactericidal/permeability increasing peptide; bacterial infection; fungal infection; endotox fungicidal; recombinant DNA; vector.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pING3356 vector construct BPI peptide fusion protein Val153(BPI).
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Pred. No. 7.8e-07;
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CC A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. CC The vector comprises: (a) DNA encoding at least one cationic bacterioidal/permeability increasing peptide (BPI), (b) DNA encoding a cleavage site (CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site (CC comprises) vector construct coding for a BPI fusion protein. The CC peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, construct coding the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, construct proteins have been found to be expressed in large amounts without constitutions and in some cases are actually secreted from the cost of the specificant proteolysis, and in some cases are actually secreted from the cost of the specification but is derived from SEQ ID NO:257 on pages 158-159, as constructed from the specification but is derived from SEQ ID NO:257 on pages 158-159, as
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Pred. No. 7.8e-07;
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Query Match Best Local Similarity

100. 9,9

Score 111; DB 2; Pred. No. 7.8e-07;

Length 179

Sequence

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RESULT 78
AAW29301
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                                                                                           Matches
                                                                                                               Query Match
Best Local
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                                                                                                                                                                                                                                          A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding a least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein product from pING3796 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, neutralising their effects. The peptides have further been shown to inhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteolysis, and in some cases are actually secreted from the host dells. This allows the indirect production of anti-microbial BPI in the control of anti-micro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant production of bactericidal/permeability increasing protein -
by expression as a fusion protein in microbial host cells, then cleaving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-480215/44.
N-PSDB; AAT86337.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angiogenesis; fungicidal; recombinant DNA; vector.
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                                                                                                                                                                                Sequence 179 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BPI peptide fusion protein pING3796 vector construct protein product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW29301,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 163-164; 186pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the BPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9735009-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AMOX ( AMOX)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pectobacterium
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  116
                                                                                           20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide from the carrier.
                                                                                                                 Similarity
                                         INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                              in microbial hosts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96US-00621803
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                                                                                                            100.0%;
                                                                                           <u>.</u>
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                                                                                                               Score 111; DB 2;
Pred. No. 7.8e-07;
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                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                  Length 179;
                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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                                                                                           Gaps
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                                                                                           0
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RESULT 80 AAB18761 ID AAB18

AAB18761 standard; protein; 190

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RESULT 79
AAW29296
ID AAW29
                                                                                                                                                                                                                                                                                              CC A new recombinant DNA vector construct has been developed which encodes a CC fusion protein and is suitable for introduction into a bacterial host. CC The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site CC carrier protein, and (b). The present sequence represents the protein CC peptides have many uses including for a BPI fusion protein. The CC infections. BPI peptides also bind to endotoxins and heparin, and CC infections. BPI peptides also bind to endotoxins and heparin, and CC infibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without CC significant proteolysis, and in some cases are actually secreted from the CC peptides in microbial hosts. N.B. The present sequence is not shown in CC the specification but is derived from SEQ ID NO:257 on pages 158-159, as
                                                                                                            Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant production of bactericidal/permeability increasing protein - by expression as a fusion protein in microbial host cells, then cleaving the BPI peptide from the carrier.
                                                                                                                                                                                                                        Sequence 179 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; AAT86335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bactericidal/permeability increasing peptide; BPI; bacterial infection; fungal infection; endotoxin; fungicidal; recombinant DNA; vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pING3354 vector construct BPI peptide fusion protein Ala153(BPI).
                                                                                                                                                                                                                                                                         designated on page 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-480215/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9735009-A1
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Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-APR-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (XOMA ) XOMA
116
                                                                                                            ch 100.0%; 9
1 Similarity 100.0%; 1
20; Conservative 0;
                                    INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96US-00621803
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                                                                                                                                       Score 111; DB 2;
Pred. No. 7.8e-07;
      135
                                                                                                            Mismatches
                                                                                                                                                                     Length 179;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; fusion protein;
heparin; angioge
                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           angiogenesis;
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                                                                                                                  Gaps
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DRXX PAXX PFXX PFAXX PFA

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                                                        Query Match
Best Local S
Matches 20
                                                                                                                                            The specification describes an improved method for obtaining a peptide from bacterial cells after fusion protein expression in the cells. The method comprises treating the bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein, in a single step. The fusion protein comprises the peptide, and a carrier protein, with an acid-cleavable site between them. The method is useful for obtaining recombinant peptides such as bactericidal permeability-increasing protein (BPI)-derived peptides from bacterial cells. BPI-derived peptides having the activity of BPI are useful as antimicrobial agents, as endotoxin binding and neutralizing agents. The present sequence represents fusion protein, comprising subunit D of a human sequence represents fusion protein, comprising subunit D of a human osteogenic protein and a human BPI derived peptide. The construct is use to produce vectors for use in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                          Improved production of recombinant peptides from bacterial cells involves treating bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fusion protein expression; bactericidal permeability-increasing protein; BPI; antimicrobial; endoroxin binding agent; neutralizing agent;
                                                                                                                   Sequence 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-602118/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-MAR-2000; 2000WO-US007148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    subunit D;
                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 45; 53pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200055322-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fusion of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB18761;
116
                                                        Similarity
20; Conserv
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                         INPETVPKPCCAPTQLNAIS 20
INPETVEKECCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            subunit D of human osteogenic protein and BPI peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  osteogenic protein.
                                                      100.0%; ilarity 100.0%; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'note=
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.166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "spacer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "human BPI derived peptide
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RESULT 81

Score 111; DB 3; Pred. No. 8.3e-07; ; Mismatches 0;

Length 190; Indels

0

Gaps

0

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116 INPETVPKPCCAPTQLNAIS

135 20

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INPETVPKPCCAPTQLNAIS

0

RESULT 82
AAW29302
ID AAW29
XX
AC AAW29
XX
AC AAW29
XX
DT 20-AF

AAW29302 standard; protein; 195

A

20-APR-1998 AAW29302;

(first entry)

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/note= "pelB leader sequence from the pectate lyase of Erwinia carotovora" 23...161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of human osteogenic protein"
                    used
                                                               A new recombinant DNA vector construct has been developed which encodes a Cf fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic construct protein, and (b) DNA encoding an amino acid (a) cleavage site (c) carrier protein, and (b) DNA encoding an amino acid (a) cleavage site (c) coated between (a) and (b). The present sequence represents the protein croduct from pNN3353 vector construct coding for a BpI fusion protein. The peptides have many uses including the treatment of bacterial and construct coding for a BpI fusion protein. The peptides also bind to endotoxins and heparin, comparalising their effects. The peptides have further been shown to construct further been shown to retains have been found to be expressed in large amounts without constricted from the constriction proteolysis, and in some cases are actually secreted from the construction of anti-microbial BPI construction of anti-microbial BPI construction.
 Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                            Recombinant production of bactericidal/permeability by expression as a fusion protein in microbial host the BPI peptide from the carrier.
                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angioge fungicidal; recombinant DNA; vector.
                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 155-156; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Better MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BPI peptide fusion protein pING3353 vector construct protein product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW29304;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chimeric.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ectobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1997-480215/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
     l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT86342
                                                                   194
100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 8.5e-07; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                Length 194;
     Indels
                                                                                                                                                                                                                                                                                                                                                                                                             increasing protein - cells, then cleaving
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     0
   Gaps
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RESULT 83
AAR51656
ID AAR51
XX AAR51
XX AAR51
XX DT 25-MA
DT 09-JU
DT 09-JU
XX OStec
XX Ostec
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                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
                                                          25-MAR-2003
01-JUL-2002
09-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                             A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein product from pING3359 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, neutralising their effects. The peptides have further been shown to inhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteolysis, and in some cases are actually secreted from the host calls. This allows the indirect production of anti-microbial BPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angiogenesis; fungicidal; recombinant DNA; vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Recombinant production of bactericidal/permeability increasing protein -by expression as a fusion protein in microbial host cells, then cleaving the BPI peptide from the carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAT86340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-SEP-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pectobacterium Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BPI peptide
                                                                                                                                                                                                                                                                                                                                                     Sequence 195 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-480215/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Better MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9735009-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Culmeric
 Osteogenic protein 1A; OP1B; osteoarthritis; osteogensis;
                             Osteogenic
                                                                                                                                                     AAR51656 standard; protein; 317 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 165-167; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (XOMA) XOMA
                                                                                                                                                                                                                                 116
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                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS
                             fusion protein 1B
                                                                                                                                                                                                                                                                                                                                                                                    microbial hosts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fusion protein pING3359 vector construct protein product
                                                                                                                                                                                                                                                                                            Conservative
                                                          (revised)
(revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-00621803
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                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                            0
                                OP1B
                                                                                                                                                                                                                                                                                                       Score 111; DB 2;
Pred. No. 8.5e-07;
                                                                                                                                                                                                                                 135
                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                         Length 195;
                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                              Gaps
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AAR85766
ID AAR8
XX
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                                         RESULT 84
                                                                                                                                            Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                             includes a MLE leader sequence suitable for promoting expression in E. coli. Fragments of the osteogenic unglycosylated polypeptides produced can be disulphide bonded to form dimers, which form an essential component of an osteogenic protein. This protein is dispersed in a biodegradable matrix which can be implanted into a mammalian bone marrow bridger and it can also accelerate allograft repair. This implant has the advantage of inducing all stages of bone formation, and it can also accelerate allograft repair. This implant has the advantage of inducing all stages of bone formation and of having a higher specific activity than other known biosynthetic materials. The implant can be used to repair non-union fractures and cartilage; treat osteoarthritis; and aid in periodontal, dented or cranifectal reconstruction. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cartilage and endochondrial bone formation; allograft repair; periodontal, dental and craniofacial reconstruction; non-union fracture repair.
                                                                                                                                                                                                     Sequence 317 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Implantable device for inducing
contg. non-glycosylated dimeric,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
               AAR85766 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ72712 encodes AAR51656 the osteogenic fusion protein 1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Col 99-102; 128pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-NOV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-DEC-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-0CT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-FEB-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (STYC ) STRYKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L8-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1994-324521/40.
                                                                                      272
                                                                                                                 ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ72712
                                                                                                                                                             Similarity
                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kuberasampath
                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91US-00810560.
92US-00827052.
92US-00841646.
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90US-00579865.
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88US-00232630
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -00483913
                                                                                                                                               100.0%; Score 111; DB 2;
100.0%; Pred. No. 1.4e-06;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ,⊣
                317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ozkaynak E,
                                                                                                                 20
                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                osteogenesis - comprises porous matrix, di:sulphide linked osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oppermann
                                                                                                                                                                          Length 317;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           (OP1B) which
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18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
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20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
The sequences given in AAR85765-70 represent fusion proteins comprising fragments of human osteogenic proteins. The MLB leader sequence is suitable for promoting expression in E. coli. The genes were expressed in E. coli under the control of a synthetic Trp promoter-operator to produce synthetic inclusion bodies. Constructs containing the Asp-Pro site were cleaved with acid. The resulting products were purified, refolded and allowed to dimerise. The proteins had osteogenic activity when properly folded and dimerised. Antisera were produced against the purified proteins. The resulting antibodies had binding specificities for osteogenic proteins. The antibodies had binding specifically to an epitope of the osteogenic protein and may be used in an implantable osteogenic proteins, such as these, may be used in an implantable osteogenic device which allows predictable bone formation to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacial; anomaly; skeletal; dental; endochrondral bone formation; MLE leader;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPIB
                                                                                                                                                                                                                                                                                                                 Antibodies with osteogenic protein binding specificity - used i purification of osteogenic proteins, and as antigenic proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
                                                                                                                                                                                                                                                                                 Disclosure; Col
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Escherichia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                             1996-010159/01.
DB; AAT02606.
                                                                                                                                                                                                                                                                                                                                                                                                                                       DG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  fracture; cartilage repair; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89US-00422613

89US-0042269

90US-005483913

90US-00559820

90US-00559865

90US-00599643

90US-0060024

90US-0061849

90US-00621849

90US-006218498
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92US-00827052.
92US-00841646.
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88US-00232630.
89US-00315342.
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                                                                                                                                                                                                                                                                            101-104; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "MLE leader
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Probably included due to a cloning anomaly"
62. .317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Residues 176-431 of hOP-1, represents pro-hOP-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ή
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OP1 (b)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                       щ
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ozkaynak
                                                                                                                                                                                                                                                                                                                                    used in
        RESULT 85
ADAW44306
ADAW44306
ADAW44306
ADAW44306
ADAW44306
ADAW4306
ADAW43
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                                                             Extraction of osteogenic protein from mixture - u for novel polypeptide chains useful as subunit(s) protein(s).
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                          Disclosure; Col
                                                                                                                                           N-PSDB;
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1998-158353/14. DB; AAV15209.

DC,

Kuberasampath

'n

Oppermann

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101-102;

127pp; English

using antibodies specific s) of dimeric osteogenic

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Query Match
Best Local S
Matches 20
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18-OCT-1990;
21-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     correct acquired and congenital cranofacial and other skeletal or dental anomalies. They may be used to induce local endochrondral bone formation in non-union fractures and in other clinical applications including dental and periodontal applications where bone formation is required. Other potential applications include cartilage repair, e.g. in the treatment of osteoarthritis. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                   04-DEC-1990;
04-DEC-1990;
                                                                                                                                                                                                        20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dimeric; recombinant protein:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW44306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 317 AA;
                                                   28-JAN-1992;
21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                  US5714589-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Omo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; osteogenic fusion protein; subunit; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human osteogenic fusion protein OP1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAY-1998
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17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                23-MAY-1995;
(STYC )
                                                                                                      22-FEB-1991;
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                                                                                                                                                                                                                                                                                                             15-AUG-1988
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20; Conserv
STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
llarity 100.0%;
Conservative 0
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                                                                                                                   90US-00621849
90US-00621988
                                                                                                                                                        90US-00616374
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 2;
Pred. No. 1.4e-06;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 317;
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RESULT 86
AAW89683
ID AAW89
XX AAW89
AC AAW89
AC
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                     18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation
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                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG-1990;
07-SEP-1990;
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24-MAR-1999
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                                                                                     (STYC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  marrow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            272 INPETVPKPCCAPTQLNAIS 291
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l similarity 100.0%;
20; Conservative 0
                                                                                     STRYKER
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(first entry)
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90US-00616374
90US-00621849
90US-00621988
91US-00661562
91US-00860566
91US-008670562
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89US-00422699
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89US-00315342
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                                                                                        CORP
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3-00579865.
3-00599543.
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Pred. No. 1.4e-06;
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Ozkaynak E;

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Best Local S
Matches 20
                                                23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                         Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage formation; allogenic implant; xenogenic implant; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid encoding mammalian osteogenic proteins in prepro form - ab to induce cartilage and bone formation when implanted in matrix, useful for repairing bone defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-131303/11.
N-PSDB; AAX00234.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                 08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                        osteogenic
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                                                                                                                                                      24-MAY-1995;
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                                                                                                                                                                                                                                                                                                                                                                            protein OP1B fusion
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A
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88US-00179406

88US-00232630

89US-00315342

89US-00422613

89US-00422613

99US-0042269

90US-00569920

90US-00579865
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Pred. No. 1.4e-06;
                                                                                                                                                                                                                                                                                                                                                                               protein
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21-NOV-1990
21-NOV-1990
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04-DEC-1990
22-FEB-1991
20-DEC-1991
20-DEC-1991
21-FEB-1992
21-FEB-1992
08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence is an osteogenic protein 1B (OP1B) fusion protein. The invention relates to a device for implantation in a mammal comprising a chondrogenic protein (I) dispersed within a biocompatible, in vivo degradable matrix defining pores which permits the influx, proliferation and differentiation of migratory progenitor cells, where (I) comprises a substantially pure protein with the amino acid sequence VPKPCCAPT, which is capable of inducing cartilage formation. The device is used as an allogenic or xenogenic implant for the induction endochondral bone formation in mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Implant for mammals permitting the influx, proliferation a differentiation of migratory progenitor cells, useful for endochondral bone formation in mammals.
                                                                                                                                                                                                               human; osteogenic protein 1B; OP1B; osteogenic device; endochondral bone formation; bone repair; cartilage repair; vascularisation; mineralisation; bone marrow differentiation
                                                                                                                                                                                                                                                                                                         06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 317
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                                                                                          04-SEP-1998;
                                                                                                                                                   US6551995-B1
                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                           Human osteogenic
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DB; AAZ27585.
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                                                                                                                                                                                                                                                                                                                                                                     standard;
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88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
89US-00422623.
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92US-00841646.
92US-00995345.
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91US-00660162.
91US-00810560.
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90US-00600024.
90US-00616374.
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                                                                                                                                                                                                                                                                         protein 1B,
                                                                                                                                                                                                                                                                                                                                                                  protein;
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Pred. No. 1.4e-06;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 317;
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or inducing
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21-NOV-1990;
04-DEC-1990;
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04-DEC-1990;
22-FEB-1991;
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22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
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21-FEB-1992;
01-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammals. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation in cludding vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammalian body. The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of human osteogenic protein 1B, OP1B.
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                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osteogenic device useful for inducing endochondral bone formation in mammals, comprises ceramic or biodegradable non-collagen polymer matrix containing substantially pure natural-sourced mammalian osteogenic
                                                                                                                       Human osteogenic
                                                                                                                                                      29-JAN-2004
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24-MAY-1995;
                                                             cartilage
                                                                            Human; osteogenic protein; OP1; CBMP2A;
endochondral bone formation; cartilage !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-DEC-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                  317
                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS
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                                                               repair;
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                                                                                                                                                   (first entry)
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92US-00827052.
92US-00841646.
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90US-00616374.
90US-00621849.
90US-00621988.
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90US-00483913.
90US-00569920.
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90US-00599543
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                                                               dental reconstructive
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                                                                                                                                                                                                                                                                                                                                                     Score 111; DB 7;
Pred. No. 1.4e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                            291
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                                                                                                                       fusion.
                                                                                                                                                                                                                  A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English
                                                                            formation;
                                                             procedure.
                                                                                          CBMP2B; osteogenic device;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rueger
                                                                                                                                                                                                                                                                                                                                                                                  Length 317;
                                                                            non-union
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                                                                                                                                                                                                                                                                                                                                                       Gaps
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Homo sapiens. Escherichia c

coli

맑 8

US2003069401-A1

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CC mammal, comparising osteogenic protein (OP) dispersed within a comparising osteogenic protein (OP) dispersed within a conformation in vivo biodegradable matrix, where OP comprises a pair (C) of unglycosylated protein chains disulphide bonded to produce dimeric Species having a conformation so that (P) is capable of inducing and cases shile to the cells. Also included are substantially a pure mammalian osteogenic protein (comprising a pair of unglycosylated polypeptide contains and capable of inducing endochondral bone formation in association with a matrix when implanted in a mammal, where the osteogenic protein capable of inducing endochondral bone formation in a sequence concains a protein capable of inducing endochondral bone formation in a mammal, a vector comprising the DNA, a host cell harbouring and capable of expressing (DNA or vector), an osteogenic protein as defined above cof expressing (DNA or vector), an osteogenic protein as defined above costeogenic device is useful for inducing local cartilage and bone costeogenic device is useful for inducing local cartilage and bone conformation, for endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, or for inducing cartilage or endochondral bone formation in a mammal, or for inducing costeogenic device is useful for cartilage repair in a mammal. The costeogenic device is useful for cartilage repair in a mammal. The costeogenic proteins are useful for succedures, or in endochondral bone constructive procedures, or in endochondral bone cartilage repair in a mammal. The osteogenic proteins are useful for selectively costeogenic proteins are useful for selectively costeogenic proteins are useful for selectively costeogenic proteins are useful for procedures. The host cell is useful for producing a protein by recombinant gene expression. The osteogenic proteins are useful to raise monoclonal are polyclonal cantibodies capable of specifically binding to an epitope of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Osteogenic device for inducing endochondral bone formation, has osteogenic protein comprising a pair of unglycosylated protein disulfide bonded to produce dimeric species, dispersed within biocompatible matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein (OP) dispersed within a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (OPPE/)
(OZKA/)
(KUBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-OCT-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oppermann H,
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PANG R H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OZKAYNAK E.
KUBERASAMPATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPPERMANN H.
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90US-00621988
91US-00660162
91US-00810560
92US-00827052
92US-00841646
92US-00841646
92US-00147023
95US-00147023
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90US-00483913.
90US-00569920.
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90US-00616374.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein chains within
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pang
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RESULT 90
ADM80495
ID ADM80
XX ADM80
AC ADM80
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-AUG-1988;
28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
24-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             osteogenic protein. The present sequence represents a human osteogenic protein as a fusion protein with an E. coli leader sequence for heterologous expression. Note: The claims refer to regions of mouse and human osteogenic proteins which are functional in the osteogenic device however the authors refer to a DNA SEQ ID number where they really mean
protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a non-union fracture in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage repair in a mammal, for
                                                                                                                                                                    The invention relates to an osteogenic device for implantation in mucomprising osteogenic protein dispersed within biocompatible matrix defining pores, differentiation, and proliferation of migratory progenitor cells from body of mammal, improvement where osteogenic
                                                                                                                                                                                                                                                                                                                                                                                        Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochouses.
                                                                                                                                                                                                                                                                                                                                                                      comprising paid
bone formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cartilage repair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human; osteogenic device; osteogenic protein; OPIB; biocompatible matrix; endochondral bone formation; non-union fracture; cartilage formation; periodontal reconstructive procedure;
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                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Opperman H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-DEC-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic protein,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (STYC)
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88US-00232630.
92US-00827052.
92US-00841646.
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95US-00449699.
98US-00148925.
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100.0%;
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Pred. No. 1.4e-06;
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RESULT 91
ADDOS621
ID ADDOS6
XX ADOS5
XX ADOS5
XX 15-JU
XX EXMES
XW EXMES
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XW INMUN
XW INMUN
KW INMUN
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          use in endochondral bone reconstructive procedures. The device is useful for inducing cartilage or endochondral bond formation in a mammal comprising the step of implanting the mammal at a locus accessible to migratory progenitor cells. The device is useful for inducing local cartilage bone formation and endochondral bone formation in a non-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein is useful for selectively extracting osteogenic protein from a mixture of molecules. The present sequence represents the amino acid sequence of the human osteogenic protein, OPIB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EXMES; extracellular messenger; transgenic; human; anti-HIV; anabolic; hypertensive; antialtergic; antianemnic; antiasthmatic; antiarteriosclerotic; antiinflammatory; dermatological; immunosuppressive; antidiabetic; nephrotropic; antithyroid; muscular; neuroprotective; ophthalmological; uropathic; cytostatic; endocrine; antirheumatic; antiarthritic; antiulcer; gastrointestinal; hepatotropic; antipsoriatic; vasotropic; anticoagulant; thrombolytic; vaccine; gene therapy.
The invention relates to human extracellular messenger (EXMES) polypeptide and encoding polynucleotides. The EXMES polypeptides can be expressed by standard recombinant methodology. Compositions comprising EXMES specific antibodies are useful for treating a disease or condition associated with decreased expression of functional extracellular messengers. The polypeptide and its encoding polynucleotide is useful for diagnosing, preventing and treating autoimmune/inflammatory disorders such as AIDS, Addison's disease, allergies, anaemia, asthma,
                                                                                                                                                                                                                                                             New isolated polypeptide, useful for diagnosing, preventing, or treating autoimmune/inflammatory disorders (e.g., AIDS), cell proliferative disorders (e.g., bursitis) and endocrine disorders (e.g., dwarfism).
                                                                                                                                                                                                                                                                                                                                                                                                                                    Elliott VS,
Ramkumar J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-OCT-2002; 2002US-0416004P.
08-NOV-2002; 2002US-0424862P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-OCT-2003; 2003WO-US031535.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human EXMES polypeptide (ID 7521939CD1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO05621 standard;
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-340907/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004033637-A2
                                                                                                                                                                                                                Claim 1; SEQ ID NO 12; 137pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INCYTE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 111; DB 8; ilarity 100.0%; Pred. No. 1.4e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Emerling
Lee SY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                    BM,
Tran
                                                                                                                                                                                                                                                                                                                                                                                                                                    Lindquist EA, Khare R, Chawla NK; UK, Richardson TW, Marquis JP, S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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Ox
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 92
AAR44752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 20
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glomerulonephritis, Grave's disease, myasthenia gravis, Reiter's syndrome, Werner syndrome, rheumatoid arthritis, Sjogren's syndrome, multiple sclerosis, ulcerative coltius, a cell proliferative disorder such as actinic keratosis, arteriosclerosis, bursitis, cirrhosis, hepatitis, myelofibrosis, psoriasis, cancers, and endocrine disorders such as aneurysm, vascular malformation, thrombosis, Sheehan syndrome, kallman's disease, and dwarfism. The oligonucleotide primers derived from the polymucleotides encoding the polypoptide is useful in transcript single nucleotide polymorphisms. The microarray is useful in transcript number of genes simultaneously. The polypoptide may be used to generate hybridization probes useful in mapping the naturally occurring genomic sequence and for screening libraries of compounds in any of a variety of drug screening techniques. The present sequence represents a human EXMES of the presents and the particular sequence are presents and some expensive and some e
Sequence 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atherosclerosis, Crohn's disease, atopic dermatitis, diabetes mellitus
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1 INPETVPKPCCAPTQLNAIS
                                      20;
                                               Similarity
INPETVPKPCCAPTQLNAIS
                                      Conservative
                                             100.0%;
                                      0,
                                      Score 111; DB 8;
Pred. No. 1.6e-06;
); Mismatches 0;
 339
                  20
                                       Indels
                                       0
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Length

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25-MAR-2003
01-JUL-2002
06-JUN-1994
              Osteogenic
                                                                                                                                                                  AAR44752 standard;
protein; bone; cartilage; matrix; osteoarthritis;
ation; mineralisation; differentiation.
                                           fusion
                                                                        (revised)
(revised)
(first en
                                           protein OPID.
                                                                                                                                                                  protein; 408
                                                                            entry)
```

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Key
       Region
                           Region
                                                            Homo
                                                            sapiens
                                       Location/Qualifiers
                  /label= Leader sequence
          .408
"Pro form of OP1
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17-OCT-1989
22-FEB-1990
20-AUG-1990
07-SEP-1990
18-OCT-1990
21-NOV-1990
04-DEC-1990
04-DEC-1990
                                                                                                                                              15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                                     30-NOV-1993
                                                                                                                                                                                    08-APR-1988;
                                                                                                                                                                                                            21-FEB-1992;
                                                                                                                                                                                                                                                           US5266683-A.
90US-00579865.
90US-00599543.
90US-0060024.
90US-00616374.
90US-00621849.
90US-00621988.
91US-0066016.
91US-00810560.
                                                                                                            90US-00483913.
90US-00569920.
                                                                                                                                                89US-00315342.
89US-00422613.
                                                                                                                                                                                                             92US-00841646
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RESULT 93
AAR51658
ID AAR51
XX AAR51
AC AAR51
XX DT 01-U
DT 09-U
DT 09-U
DT 09-U
XX Ostec
XW Ostec
XW Carri
XW DETIC
XW 
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Best Local S
Matches 20
  08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
01-JUL-2002
09-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (residues 1-13) suitable for promoting expression in E. Coli. The protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Osteogenic protein 1D; OPID; osteoarthritis; osteogensis; cartilage and endochondrial bone formation; allograft repair; periodontal, dental and craniofacial reconstruction; non-union fracture repair.
                                                                                                                                                                                                                                                     18-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteogenic fusion protein 1D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The fusion protein encodes the entire pro form of OPI (residues 57-AAR44746) linked via an Asp-Pro cleavage site to a leader sequence
                                                                                                                                                                                                                                                                                                          11-OCT-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR51658 standard; protein; 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                                                                                                                                                                                                                                               US5354557-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR51658;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1993-395405/49.
DB; AAQ53148.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363 INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 100.0%; Score 111; DB 2; Similarity 100.0%; Pred. No. 1.7e-06; 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVEKECCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Col 111-116; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
88US-00232630

89US-00315342

89US-00422613

89US-00422693

90US-00483913

90US-00569920

90US-00579865
                                                                                                                                                                                                 88US-00179406
                                                                                                                                                                                                                                                     92US-00993387
                                                                                                                                                                                                                                                                                                                                                                                                                      1. .16
/label= sig_peptide
/note= "leader sequ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPID
                                                                                                                                                                                                                                                                                                                                                                                                                      sequence (short TRP)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        form of OP1 (residues 39-431 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 408;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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RESULT 94
AAR85768
ID AAR85
XX

AAR85768 standard; protein; 408

AAR85768;

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363

INPETVPKPCCAPTQLNAIS 382 INPETVEKECCAPTOLNAIS 20 Conservative

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1 Similarity 20; Conserv

0,

Mismatches

0;

Gaps

0

Cleavage-site

/note= "Short TRP leader
14. .15 Location/Qualifiers

Peptide

Homo sapiens. Escherichia coli.

non-union fracture;

Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; canofactal; anomaly; skeletal; dental; endochrondral bone formation; MLE leader;

cartilage repair; osteoarthritis.

OPID fusion protein encoded by OPI(d) cDNA

(revised)
(first entry)

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Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
20-DEC-1991;
                                                                                                                 AAQ72714 encodes AAR51658 the osteogenic fusion protein 1D (OP1D) which includes a "short TRP" leader sequence suitable for promoting expression in E. coli. Fragments of the osteogenic unglycosylated polypeptides produced can be disulphide bonded to form diners, which form an essential component of an osteogenic protein. This protein is dispersed in a biodegradable matrix which can be implanted into a mammalian bone marrow cavity, here it can induce local cartilage, bone and endochondrial bone formation; and it can also accelerate allograft repair. This implant has the advantage of inducing all stages of bone formation and of having a higher specific activity than other known biosynthetic materials. The implant can be used to repair non-union fractures and cartilage; treat osteoarthritis; and aid in periodontal, dental or cranifacial reconstruction. (Updated on 01-UTU-2002 to add missing PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-324521/40.
N-PSDB; AAQ72714.
                                                                      Sequence 408 AA;
                                                                                                                                                                                                                                                                                                                                                                                                          Implantable device for inducing osteogenesis - comprises porous matrix
contg. non-glycosylated dimeric, di:sulphide linked osteogenic protein
                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Col 111-114; 128pp;
                                                                                                        PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
91US-00660162.
91US-00660162.
91US-00827052.
92US-00841646.
                   100.0%;
                   Score 111; DB 2;
Pred. No. 1.7e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                            English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oppermann
                                  Length 408;
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Kuberasampath T, (STYC) STRYKER CORP

Ozkaynak

'n

Rueger DC,

Pang RHL,

Oppermann H;

Protein

/note= "Asp-Pro acid cleavage site" 16. .317

/note= "Residues 39-431 of hOP-1, represents pro-hOP-1"

US5468845-A

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                                                                                                                                                                                                                                                     The sequences given in AAR85765-70 represent fusion proteins comprising CC fragments of human osteogenic proteins. The MLE leader sequence is cuitable for promoting expression in E. coli. The genes were expressed in E. coli under the control of a synthetic Trp promoter-operator to produce synthetic inclusion bodies. Constructs containing the Asp-Pro site were cleaved with acid. The resulting products were purified, refolded and CC allowed to dimerise. The proceins had osteogenic activity when properly CC folded and dimerised. Antisera were produced against the purified proteins. The resulting antibodies had binding specificities for osteogenic proteins. The antibodies are capable of binding specifically CC to an epitope of the osteogenic proteins, such as these, may be used in purification CC protocols. Osteogenic device which allows predictable bone formation to correct acquired and congenital cranofacial and other skeletal or dental correct acquired and congenital cranofacial and other skeletal or dental connections. They may be used to induce local endochrondral bone formation CC dental and periodontal applications where bone formation is required. CC other potential applications include cartilage repair, e.g. in the CC treatment of osteoattrittis. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                   Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antibodies with purification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rueger
                                                                                                                                                                                                             Sequence 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1996-010159/01.
DB; AAT02608.
  363
                                                   μ
                                                                                                   l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВĊ,
                                             INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Col 113-116;
                                                                                                      Conservative
                                                                                                                                                                                                                   Å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       osteogenic
osteogenic
                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein binding proteins, and as
                                                                                                      <u>,</u>
                                                                                                                             Score 111; DB 2;
Pred. No. 1.7e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oppermann H,
  382
                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          specificity - used i
s antigenic proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ozkaynak
                                                                                                                                                          Length 408;
                                                                                                      Indels
                                                                                                      0
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STRYKER

CORP.

91US-00810560. 92US-00827052. 92US-00841646.

9108-00660162

22-FEB-1990; 20-AUG-1990; 07-SEP-1990; 18-OCT-1990; 18-OCT-1990; 21-NOV-1990; 04-DEC-1990; 04-DEC-1990; 04-DEC-1990; 22-FEB-1991; 28-JAN-1992; 21-FEB-1992;

90US-00600024. 90US-00616374. 90US-00621849. 90US-00621988.

90US-00483913. 90US-00569920. 90US-00579865.

89US-00422699 89US-00422613 89US-00315342 88US-00179406 88US-00232630 93US-00147023

90US-00599543

15-AUG-1988; 23-FEB-1989; 17-OCT-1989; 17-OCT-1989;

08-APR-1988; 01-NOV-1993;

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18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
04-DEC-1991;
22-FEB-1991;
20-DEC-1991;
                                                                                                                                                                                    28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
                                                                                                                                                                                                                                                  22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                 08-APR-1988;
15-AUG-1988;
23-FEB-1989;
                                                                                                                                                                                                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                    US5714589-A
                                                                                                                                                                                                                                                                                                                                                                   dimeric;
                                                                                                                                                                                                                                                                                                                                                                         Human; osteogenic fusion protein; subunit; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                     Human osteogenic fusion protein OP1D.
                                                                                                                                                                                                                                                                                                                                                                                                  27-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                               AAW44308;
                                                                                                                                                                                                                                                                                                                                                                                                                          AAW44308 standard; protein; 408
                                                                                                                                                                                                                                                                                                                        03-FEB-1998
                                                                                                                                                                                                                                                                     17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                           23-MAY-1995;
                                                                                                                                                                       (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                             -1990
                                                                                                                                                                                                                                                                                                                                                                   recombinant protein.
                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                               90US-00569920
90US-00579865
90US-00599543
90US-00600024
90US-00616374
90US-00621849
90US-00621988
91US-00621988
91US-00827052
                                                                                                                                                                                                                                                               89US-00422699
90US-00483913
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89US-00315342
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                                                                                                                                                                                           -00841646
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Pang RHL, Rueger DC, Kuberasampath T, Oppermann Ή Ozkaynak

N-PSDB; WPI; 1998-158353/14.

Extraction of osteogenic protein from mixture - using antibodies specific for novel polypeptide chains useful as subunit(s) of dimeric osteogenic protein(s).

Disclosure; Col 111-114; 127pp; English

for selectively extracting an osteogenic protein (OP) from a mixture. The method comprises: (a) exposing the mixture to an antibody that specifically binds OP, separating the resulting antibody-protein complex from the mixture, and dissociating the complex. In the methods OP comprises a pair of oxidised subunits that are disulphide-bonded to form a dimer, and one of the subunits has an amino acid (aa) sequence sufficiently homologous to residues 335-431 of a 431 aa protein designated OPS, sequence given in the specification. In dimeric form OP is capable of inducing cartilage and endochondral bone formation in a mammal when disposed within a matrix implanted in the mammal. The methods are used for recovering the recombinant proteins from cell cultures The present sequence represents a human osteogenic fusion protein, which is used in the present invention. The present invention describes methods for selectively extracting an osteogenic protein (OP) from a mixture. The on in a The methods

Sequence 408 ΑĀ

Query Match Best Local S Matches 20 1 Similarity 20; Conserv Conservative 100.0%; Score 111; DB 2; 100.0%; Pred. No. 1.7e-06; tive 0; Mismatches 0; Length 408; Indels 0 Gaps 0

95

RESULT

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363 INPETVPKPCCAPTQLNAIS 382 INPETVPKPCCAPTQLNAIS 20

standard;

protein; 408

AAW89685

AAW89685

20-MAR-2003 24-MAR-1999 (revised) (first en

fusion protein entry)

OPID.

Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation; marrow differentiation.

Homo sapiens

US5863758-A Synthetic.

23-MAY-1995; 95US-00449700

08-APR-1988; 15-AUG-1988; 20-AUG-1990; 07-SEP-1990; 23-FEB-1989 -1989; .1989; 88US-00232630

18-OCT-18-OCT-1990 -1991 -1990; -1990; 89US-00315342 89US-00422693 89US-00483913 99US-00483913 90US-00579865 90US-00579865 90US-005299543 90US-00616374 90US-00621849 90US-00621849

(STYC) STRYKER CORP

Rueger DC, Kuberasampath T, Oppermann Ħ, Ozkaynak Ħ

WPI; 1999-131303/11. N-PSDB; AAX00236.

Nucleic acid encoding mammalian osteogenic I to induce cartilage and bone formation when to induce cartilage and bon for repairing bone defects. proteins in n implanted : n prepro form - able in matrix, useful

Disclosure; Col 111-114; 127pp; English.

AAW89685
AAW89685
AAW89685
AC AAW89
AC AAM89
AC AAAR8
AC AAM89
AC AAACA
AC AAM89
AC AAM89
AC AAM89
AC AAACA
AC The present invention describes isolated DNA (I) encoding at least one osteogenically active region of human osteogenic protein-1 in prepro form (OPI-PP), murine OPI-PP, murine OPI-PP nurine OPI-PP Also described are: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal when implanted in a matrix; (B) vectors containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a prepro- or pro-OPI, and related vectors and transformed cells; (E) osteogenic protein (II) produced by expression of transformed containing cells; able to induce bone and cartilage formation; (F) mature OPI that from mammalian cells following expression of the sequence that

Implant for mammals permitting the influx,

proliferation and

1999-589530/50. DB; AAZ27587.

DC,

Pang RHL,

Kuberasampath

'n

Ozkaynak E,

Oppermann

Ξ

RESULT 97
AAY43119
ID AAY43
XX AAY4
AC AAY43
XX DT 16-DE
DE Osteo
XX Chond
KW Cell
XX Osteo
XX Synth
XX 24-MA
PF 24-MA
PF 21-PC
PR 11-CC
PR 11-CC
PR 11-CC
PR 11-CC
PR 21-PC
P 밁 Ś 8888888888 Matches Query Match Best Local 21-FEB-1992; 22-DEC-1992; 01-NOV-1993; 04-DEC-1990; 04-DEC-1990; 22-FEB-1991; 20-AUG-1990; 07-SEP-1990; 18-OCT-1990; encodes hOP1-PP; and (G) production of an active osteogenic composition by truncating mature OP1 protein. Host cells of (C) are used to produce proteins able to induce cartilage and bone formation, e.g. for correction of acquired or congenital craniofacial defects or other skeletal or dental disorders; to heal non-union fractures; to repair cartilage, e.g. in osteoarthritis, or generally wherever bone formation is required. The proteins induce complete development of endochondral bone, including vascularisation, mineralisation and bone marrow differentiation. The present sequence represents an osteogenic fusion protein OP1D. (Updated on 20-MAR-2003 to correct PA field.) 20-DEC-1991; 28-JAN-1992; 18-OCT-1990; 21-NOV-1990; 23-FEB-1989 17-OCT-1989 08-APR-1988; 24-MAY-1995; Synthetic allogenic implant; xenogenic osteogenic protein. Chondrogenic protein; cell differentiation; Osteogenic protein OPID fusion protein sequence Sequence 408 AA; 17-OCT-1989 28-SEP-1999 US5958441-A 16-DEC-1999 AAY43119 (STYC 363 l Similarity 20; Conserv 1 INPETVPKPCCAPTQLNAIS 20 STRYKER BIOTECH standard; protein; 408 INPETVPKPCCAPTQLNAIS Conservative (first entry) 900S-00621988 910S-00660162 910S-00810560 920S-00827052 920S-00841646 920S-00995345 930S-00147023 90US-00616374 89US-00422699 88US-00232630 88US-00179406 95US-00449699 90US-00579865 100.0%; biodegradable matrix; cell proliferation; migratory progenitor cell; cartilage formation; nogenic implant; endochondral bone formation; CORP 0 Score Pred. 382 Mismatches e 111; DB 2; . No. 1.7e-06; smatches 0; Length 408; Indels 0 0

THX & X O O O O O O O O O X Q

Disclosure; Col 109-112; 127pp; English

differentiation of migratory progenitor cells, useful for inducing endochondral bone formation in mammals.

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A AC

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RESULT 98
ADJ62690
ID ADJ62690
ADJ62690
ADJ62690
AC ADJ6
AC AD
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Matches 20
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23-FEB-1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human; osteogenic protein 1D; OPID; osteogenic device; endochondral bone formation; bone repair; cartilage repair; vascularisation; mineralisation; bone marrow differentiation
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                                 Oppermann H,
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21-FEB-1992
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                                    Ozkaynak E,
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88US-00232630

88US-00422613

89US-00422623

89US-00422693

99US-00483913

89US-00483913

90US-00569920

90US-00579865

90US-00579865

90US-00616374

90US-00621988

91US-00621988
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92US-00841646.
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100.0%; Pred. No. 1.7e-06;
                                    Kuberasampath
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                                    Rueger DC,
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ADESTLIT 
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The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammals. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation in including vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammalian bone. The present sequence represents the amino acid sequence of human osteogenic protein 1D, OPID.
                                                                                                                                                                                                                                                                                                                                                                                                                                               usteogenic device useful for inducing endochondral bone formation mammals, comprises ceramic or biodegradable non-collagen polymer materialing substantially pure natural-sourced mammalian osteogenic protein.
Sequence 408 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-575998/54
N-PSDB; ADJ62689.
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Query Match Best Local S Matches 20 363 н 20; Conserv INPETVPKPCCAPTQLNAIS INPETVPKPCCAPTQLNAIS 100.0%; ilarity 100.0%; Conservative 0 0 382 Score 111; DB 7; Pred. No. 1.7e-06; ; Mismatches 0; 20 Length 408; Indels 0 Gaps 0

ADE52761 ADE52761; standard; protein; (first entry) 408

cartilage Human; osteogenic endochondral bone repair; protein; OP1; CBMP2A; CBMP2B; osteogenic device; formation; cartilage formation; non-union fractudental reconstructive procedure. racture;

osteogenic protein,

OPID

fusion

08.APR-1988 15-AUG-1989 23-FEB-1989 17-OCT-1989 17-OCT-1989 17-OCT-1989 22-FEB-1990 18-OCT-1990 18-OCT-1990 18-OCT-1990 04-DEC-1990 04-DEC-1990 04-DEC-1990 04-DEC-1990 Homo sapiens. Escherichia coli US2003069401-A1. 24-OCT-1997; 10-APR-2003 90US-00569920. 90US-00599543. 90US-0060024. 90US-00616374. 90US-00621849. 90US-00621988. 88US-00232630. 89US-00315342. 89US-00422613. 89US-00422699. 90US-00483913. 88US-00179406 97US-00957425

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Comparising osteogenic protein (op) dispersed within a biocomparible, in vivo biodegradable matrix, where Op comprises a pair (P) of unglycosylated protein chains disulphide bonded to produce dimeric (P) of unglycosylated protein chains disulphide bonded to produce dimeric (P) of unglycosylated protein chains disulphide bonded to produce dimeric cereins having a conformation in mammal when disposed in the matrix and cacessible to the cells. Also included are substantially a pure mammalian (C osteogenic protein (comprising a pair of unglycosylated polypeptide chains and capable of inducing endochondral bone formation in association (C with a matrix when implanted in a mammal, where the osteogenic protein capable of inducing endochondral bone formation in a comprises peptides derived from human or mouse OPI), a DNA sequence conditions a protein capable of inducing endochondral bone formation in a mammal, where the osteogenic protein a capable of expressed from recombinant DNA, a host cell harbouring and capable of binding appetition chain useful (C as a submit of a dimeric osteogenic protein and an antibody (Ab) capable (C as a submit of a dimeric osteogenic protein and an antibody (Ab) capable (C cartilage or endochondral bone formation in a mammal, for inducing (C cartilage or endochondral bone formation in a mammal, for inducing cartilage and bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, in the costeogenic device is useful for cartilage repair in a mammal, in costeogenic device is useful for cartilage repair in a mammal, in the costeogenic proteins are useful to rait mammal, for selectively creatively procedures, or in endochondral bone costeogenic protein sare useful to rait monoclonal are polyclonal costeogenic protein sare useful to raite monoclonal are polyclonal costeogenic protein with an E. coll leader sequence for the costeogenic protein selectively binding to an amonoclonal of the osteogenic device, which are functional in the osteogenic device, however
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                                                               Query Match
Best Local S
Matches 20
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28-JAN-1992;
21-FEB-1992;
21-FEB-1992;
22-DEC-1992;
01-NOV-1993;
23-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteogenic device for inducing endochondral bone formation, osteogenic protein comprising a pair of unglycosylated prote disulfide bonded to produce dimeric species, dispersed within
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-008898/01.
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(OZKA/)
(KUBE/)
(RUEG/)
                                                                                                                                       Sequence
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 363
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                                                                                                                                                                         the authors re
r to a protein.
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PANG R H L.
                                                                                      Similarity
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                                                                                                                                           408
                          INPETVPKPCCAPTQLNAIS
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                                                                     Conservative
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92US-00827052.
92US-00841646.
92US-00995345.
93US-00147023.
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                                                                   0,
                                                                                    Score 111;
Pred. No. 1
 382
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                                                                       Mismatches
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                                                                                      DB 8;
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RESULT 100 ADM80499

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INPETVPKPCCAPTQLNAIS

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defining pores, differentiation, and proliferation of migratory protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage or endochondral bone formation in a mammal, for use in periodontal or dental comprising the step of implanting the mammal and a mammal comprising the step of implanting the mammal and accessible to migratory progenitor cells. The device is useful for inducing local cartilage bone formation and endochondral bone formation in a mon-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein from a mixture of molecules. The present sequence represents the camino acid sequence of the human osteogenic protein, OP1D.
                               Matches
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01-NOV-1993;
24-MAY-1995;
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15-AUG-1988;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochondral
                                                                                                                                                                                                                                                                                                                                                                                        comprising osteogenic protein defining pores, differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human, osteogenic device; osteogenic protein; OPID; biocompatible matrix; endochondral bone formation; non-union fracture; cartilage formation;
                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 15; 136pp; English
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20; Conserv
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92US-00827052.
92US-00841646.
93US-00147023.
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98US-00148925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88US-00179406
                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             m
                                                                                                                                                                                                                                                                                                                                                                                                                             an osteogenic device
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP1D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kuberasampath T,
                               0
                                               Score 111; DB 8;
Pred. No. 1.7e-06;
20
                                                                                                                                                                                                                                                                                                                                                                                                             steogenic device for implantation in mammal, dispersed within biocompatible matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A
                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rueger DC,
                                                                Length 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pang RHL;
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E CONTRACTOR OF THE CONTRACTOR

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RESULT 101
                               Matches
                                     Query Match
Best Local
                                                                                                                                                                                                                                            15-NOV-1989;
17-NOV-1989;
07-MAR-1990;
                                                                                                                                                                                                                                                                           28-MAR-1989;
04-MAY-1989;
23-JUN-1989;
23-JUN-1989;
                                                                                    The positive clone PEH7-9 was identified from a human osteosarcoma cDNA library and its DNA insert was sequenced. It was found to contain the BMF-7 coding sequence. Mature EMP-7 is expected to comprise a homodimer whose subunits are truncated versions of the BMP-7 proprotein. (See features) See also AAQ06166-Q06173, AAQ06187, AAQ06189-Q06192. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                           Wang
                                                                                                                                                                                                                                                                                                                                                                         Cleavage-site
Protein
                                                                                                                                                                   New bone morphogenic proteins, BMP-5, -6 and -7 - used for stimulating promoting and inducing bone and/or cartilage formation, wound healing a
                                                                                                                                                                                                                                                                                                                                                                                           Key
                                                                                                                                                                                                                                                                                                                                                                                                                         cartilage formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAR-2003
30-JAN-1991
                                                              Sequence
                                                                                                                                                                                            WPI; 1990-320266/42
                                                                                                                                                                                                                                                                                                                                                  WO9011366-A
                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR07335;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR07335 standard; protein;
                                                                                                                                            Example; Page 65; 96pp; English.
                                                                                                                                                                                                                           (GEMY )
                                                                                                                                                                                                                                                                    23-JUN-1989;
                                                                                                                                                                                                                                                                                                                   27-MAR-1990;
                                                                                                                                                                                                                                                                                                                                  04-OCT-1990.
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                                                                                                                                                                                                             EA,
386
                                                                                                                                                                                                                                                                                                                                                                                                                                  bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bone
                               20;
                                      Similarity
                                                                              correct PA
                                                                                                                                                                                                                           GENETICS
                                                              431
         INPETVPKPCCAPTQLNAIS 20
INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                            Wozney JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                 morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Morphogenesis Protein-7.
                               Conservative
                                                              ĀΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                          89US-00329610

89US-00347559

89US-00370544

89US-00370547

89US-00370549

89US-004370549

89US-00438919

99US-00439033
                                                                                                                                                                                                                                                                                                                   90WO-US001630
                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
299. .300
301. .431
                                                                                                                                                                                                                                                                                                                                                                   /label= mature BMP-7
                                                                                                                                                                                                                            INST
                                                                              field.)
                                      100.0%;
                                                                                                                                                                                                                             INC
                                                                                                                                                                                                             Celeste
                                                                                                                                                                                                                                                                                                                                                                                                                                 protein-7; wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431 AA
                               0
                              Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  tissue
                                             Length 431;
                               Indels
                               0,
                              Gaps
                                                                                                                     a cDNA
the BMP
                                                                                                                                                                     and
                               0
                25-MAR-2003
09-JAN-2003
22-JUL-1991
                                                                                                                                                                                                            17-OCT-1989;
22-FEB-1990;
20-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cebus apella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalian
               Sequence 431 AA;
                                                                                                             Disclosure; Fig 2; 105pp; English.
                                                                                                                                                     N-PSDB; AAQ11803
                                                                                                                                                                            Opperman
                                                                                                                                                                                                                                             17-OCT-1989;
                                                                                                                                                                                                                                                                            WO9105802-A.
                                                                                                                                                                                                                                                                                                          Peptide
                                                                                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                             WPI; 1991-148697/20.
                                                                                                                                                                                             (CREA-)
                                                                                                                                                                                                                                                            02-MAY-1991
                                                                                                                                                                                                                                                                                                                                                         Peptide
                                                                                                                                                                                                                                                                                                                                                                                                         Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         endochondral
                                                                                                                                                                                            CREATIVE BIOMOLECULES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(revised)
(first en
                                                                                                                                                                            Kuberasamp
                                                                                                                                                                                                            89US-00422699.
90US-00483913.
90US-00569920.
                                                                                                                                                                                                                                             89US-00422699.
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                                                                                                                                                                                                                                                                                                                                                                                                           /note=
100. .;
                                                                                                                                                                                                                                                                                            note= "Claim 5"
                                                                                                                                                                                                                                                                                                                   /label= OP1-16A
/note= "Claim 10"
                                                                                                                                                                                                                                                                                                                                          note=
                                                                                                                                                                                                                                                                                                                                                                   'label= OP1-16L
'note= "Claim 8"
                                                                                                                                                                                                                                                                                                                                                                                          label= OP1-16S
note= "Claim 7"
                                                                                                                                                                                                                                                                                                                                                                                                                          label=
                                                                                                                                                                                                                                                                                                    18. .231
label= (
                                                                                                                                                                                                                                                                                                                                                  label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
                                                                                                                                                                                                                                                                                                                                    . 231
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                                                                                                                                                                                                                                                                                                                                                                                                                                        on/Qualifiers
                                                                                                                                                                                                                                                                                                                                          "Claim 9"
                                                                                                                                                                                                                                                                                                                                                                                                                  "Claim 6"
                                                                                                                                                                             Н
                                                                                                                                                                                                                                                                                                     OP1-16V
                                                                                                                                                                                                                                                                                                                                                    OP1-16M
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                                                                                                                                                                              Rueger
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RESULT 102
AAR12106
ID AAR121
XX
AC AAR121

AAR12106

standard; protein; 431 AA

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386

INPETVPKPCCAPTQLNAIS

405

AAR12106;

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                                                Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                    Pragments of osteogenic protein product may be used to impregnate a matrix upon which endochondral bone formation may be reliably induced, including vascularisation, mineralisation and bone marrow differentiation. The technique is especially useful in dental and craniofacial anomalies, and may also be applied to cartilage repair, eg.osteoarthritis. The OPI product may be expressed from a transformed mammalian host cell, eg.CHO or simian kidney cells. (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Osteogenic device for implantation in a mammal - comprising a matrix of treated collagen particles and a protein which induces bone formation.
  Н
                                                   l Similarity
20; Conserv
  INPETVPKPCCAPTQLNAIS
                                                100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bone formation; osteoarthritis
                                                     0
     20
                                                Score 111; DB 2;
Pred. No. 1.8e-06;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ozkaynak E,
                                                                                                   Length 431;
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                                                     <u>۰</u>
                                                     Gaps
                                                                                                                                                                                                                                                            09-JAN-
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RESULT 104
AAR27289
ID AAR272
XX
AC AAR272
XX
DT 25-MAF
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                                                                                                                                                             RESULT 103
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                                                                                                                                 Query Match
Best Local
                                                                                                                        Matches
                                                                                                                                                                                                                                                                 Osteogenic polypeptides capable of inducing endochondral bone formation useful for bone and cartilage repair, treatment of osteoarthritis and correction of skeletal and dental abnormalities.
                                                                                                                                                                              The human OP1 gene encodes am immature translation product which is processed to a mature sequence of 139 amino acids ("OP1-18"). The mature hOP1 protein shows significant sequence homology (i.e. 98%) with the mature murine OP1 ("mOP1"). The sequences differ at only three positions. The prepro sequences share substantially less homology. See AAR23832 for murine OP1. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                        N-PSDB; AAQ24518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR23833;
25-MAR-2003
                  AAR27289;
                                     AAR27289 standard;
                                                                                                                                                                                                                                                                                                                WPI; 1992-167101/20.
                                                                                                                                                                                                                                                                                                                                    Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
09-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR23833 standard; protein; 431
                                                                                                                                                             Sequence 431 AA;
                                                                                                                                                                                                                                               Disclosure; Page 39-41; 54pp; English.
                                                                                                                                                                                                                                                                                                                                                                         18-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                             30-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9207004-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Prepro protein;
                                                                                                                                                                                                                                                                                                                                                       (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein
                                                                                    386
                                                                                                    1 INPETVEKECCAPTOLNAIS 20
                                                                                                                       . Similarity 20; Conserv
                                                                                    INPETVEKECCAPTOLNAIS 405
                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                    Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
(revised)
                                                                                                                                                                                                                                                                                                                                                                         90US-00600024
                                                                                                                                                                                                                                                                                                                                                                                           91WO-US007654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          osteogenesis; human hippocampus; OP1-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein hOP1-PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                   note= "conserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          label= OP1-18
note= "mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note= "conserved
                                    protein; 431
                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OP7
                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPS
                                                                                                                                                                                                                                                                                                                                   Kuberasampath
                                                                                                                        ,
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                                                                                                                                 Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein"
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                                     ž
                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  six cysteine skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seven cysteine
                                                                                                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                                                                                                                                                    Rueger DC
                                                                                                                                          Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               skeleton"
                                                                                                                         Indels
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RESULT 105
AAR44746
ID AAR447
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mature hOP1 is one of the preferred known morphogens which can be used in the manufacture of pharmaceuticals for inducing non-chondrogenic mammalian tissue growth, progenitor cell proliferation and hepatic tissue growth and for maintaining the phenotypic expression of differentiated cells in a mammal. Morphogens sharing at least 70% homology with hOP1 or at least 65% identity with residues 43-139 of hOP1 are included. (Updated on 25-MAR-2003 to correct PN field.)
08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Compsns. for increasing progenitor cell population - contain a moto induce proliferation, useful for inhibiting neoplastic growth, inducing tissue repair and in diagnosis of tissue dysfunction.
                                                                                                                                                                                                                                                                                                                                   Osteogenic protein; bone; cartilage; matrix; osteoarthritis; repair; vascularisation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein OP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic protein hOP1.
                                                                                           21-FEB-1992;
                                                                                                                                                     30-NOV-1993
                                                                                                                                                                                                              US5266683-A
                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR44746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR44746 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 93-95; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAQ28735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1992-331475/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cohen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9215323-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Morphogen; morphogenic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-FEB-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  386
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(revised)
(first entry)
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   88US-00179406.
88US-00232630.
                                                                                           92US-00841646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rueger
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  morphogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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89US-00315342. 89US-00422613. 89US-00422699. 90US-00483913.

1975. 1825. EL

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RESULT 106
AAR33931
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Best Local S
Matches 20
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20-DEC-1991;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The osteogenic protein when in association with a matrix can induce at feel locus of an implant the full development cascade of endochondral bor formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarchritis. This is the preprior form of the protein. (Updated on 01-JUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 14; Col 69-72; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-1990;
                                                                                                                                                                                                                                                                                           Morphogen; homodimer; stimulate; proliferation; progenitor cell; differentiation; growth; redifferentiation; transformation; human; Drosophila; Xenopus; committed cells; hippocampus.
                                                                                             28-AUG-1992;
                                                                                                                                                18-MAR-1993.
                                                                                                                                                                                                WO9305172-A1
                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                    Morphogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003
13-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1993-395405/49.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . Similarity 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                    hOP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
larity 100.0%;
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA:
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90US-00579865
90US-00599543
90US-00600024
90US-00616374
90US-00621849
90US-00621988
91US-00621988
91US-0060162
91US-0080162
                                                                                                                                                                                                                                                                                                                                                                                              full length sequence.
                                                                                                92WO-US007359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 431;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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                                                                                                                                                                                                                                                                                                                              mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bone
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RESULT 107
AAR33408
ID AAR334
XX AAR334
XX AAR334
XX PAT 15-JUI
DT 15-JUI
XX Human
XX Human
XX TGF-be
XX Homo s
XX H
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Best Local S
Matches 20
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09-JAN-2003
15-JUL-1993
                                                                                                                                                30-AUG-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR33408;
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                                                                                                                                                                                                                                                      28-AUG-1992;
                                                                                                                                                                                                                                                                                                         18-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386
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This sequence represents the human morphogen hOP1, isolated from the hippocampus. This morphogen is inactive when reduced but is active as an oxidised homodimer and when oxidised in combination with other morphogens. These morphogens are capable of stimulating proliferation of progenitor cell, stimulating the differentiation of progenitor cells, stimulating the differentiation of progenitor cells, stimulating the differentiated cells and supporting the growth and maintenance of differentiated cells, including the tredifferentiation of transformed cells. These morphogens may also be capable of inducing redifferentiation of committed cells under appropriate environmental conditions. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                         Screening cpds. to determine ability to modulat morphogen - by assaying test tissue type cells of a prodn. level change of morphogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smart
                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 85-87; 132pp; English.
                                                                                                                                  appropriate environmental conditions. PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1993-100993/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JΈ,
                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ38857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oppermann
Cohen CN;
                              100.0%; illarity 100.0%; Conservative 0;
                                                                                                 A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ozkaynak E,
                                Score 111; DB 2;
Pred. No. 1.8e-06;
Mismatches 0;
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                              modulate effective
e cells for parameto
                                                               Length 431;
                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                             ffective concn. of a parameter indicative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
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                                  0
                                Gaps
                                    0
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standard;
                                                                       INPETVPKPCCAPTQLNAIS
                                                    INPETVPKPCCAPTQLNAIS
protein;
                                                    405
  B
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Human OP-1-PP (revised)
(revised)
(first entry)

morphogenic; osteogenic protein; developmental cascade; hOP-1; inflammation; anti-inflammatory; Transforming Growth Factor; TGF-beta super-family; hippocampus. sapiens ocation/Qualifiers

WO9304692-A1

'note=

"contains conserved

7

cysteine skeleton"

(CREA-) CREATIVE BIOMOLECULES

INC

92WO-US007358

91US-00752764. 91US-00752861. 91US-00753059.

(CREA-) CREATIVE BIOMOLECULES

Kuberasampath Ozkaynak E, Smart Pang t JE; Oppermann Ξ Rueger bc, Cohen 3

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ARASJOET 108
ARASJOET
ID AARSJOE
XX AARSJOE
XX AARSJOE
XX AARSJOE
XX AARSJOE
XX AARSJOE
XX CHUMAN
XX HUMAN
XX BONE;
XW Geficni
XW Geficni
XW Imbala
XW Imbal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                              30-AUG-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human osteogenic protein (OP)-1 is a preferred morphogen for use in treating tissue damage in e.g. inflammatory disease, autoimmune disease, arthritis, psoriasis, dermatitis, diabetes and emphysema. Proteins havir at least 60% homology with amino acids 43-139 of the mature hOP-1 can also be used. See also AAR33398. (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bone; loss; increase; fracture; post-menopausal; senile; osteoporosis; hyperparathyroidism; skeletal microstructure defects; chronic renal failure; kidney disease; osteomalacia, vitamin D; deficiency-induced osteopenia, osteoporosis; Paget's disease; bone mass; imbalance; resorption; formation; dialysis; calcium; phosphate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Morphogen-induced modulation of inflammatory response \tilde{\cdot} and resulting tissue damage, e.g. in autoimmune diseases, diabetes, asthma, ischaemia reperfusion injury, etc.
     WPI; 1993-117208/14
                                                    Kuberasampath T,
Pang RHL, Smart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
21-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-100652/12.
N-PSDB; AAQ38733.
                                                                                                                                                                                                                                                                                                    28-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                   01-APR-1993.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        metabolism.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR33905;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein
                                                                                                                             (CREA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             osteogenic protein 1 (hOP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \vdash
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20; Conserv
                                                                                                                             CREATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; ilarity 100.0%; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
                                                                                                                                                                                              91US-00752764.
91US-00752857.
91US-00752861.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein"
293. .431
                                                                                                                                                                            9208-00923780
                                                                                                                                                                                                                                                                                                    92WO-US007432
                                                    Cohen
JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 30. .292
                                                                                                                             BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note= "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .43
                                                                                                                                                                                                                                                                                                                                                                                                                                                   "conserved seven cysteine skeleton
                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                           Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cleaved
                                                                           Œ
                                                                              Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to yield mature, active
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 431;
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                                                                           'n
                                                                           Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                           DC;
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RESULT 109
AAR36734
ID AAR367
XX AAR367
XX 25-MAR
DT 25-MAR
DT 13-SEP
XX Bone m
XW Enduch
XW Induct
XX Induct
XX Homo s
XX Homo s
XX WO9309
XX WO9309
XX WO9309
XX WO9309
XX ISTAEL
XX IST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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  The sequence is that of the may be used in the prodn.
                                                                                                                                                                                                                                                                                                                                                                                                                         04-NOV-1991;
07-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bone morphogenetic protein; bone defect treatment; healing; wound; injury; tissue repair; osteoporosis; burns; incisions; ulcers; neuronal survival increase; fracture reduction; cartilage growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Use of morphogenic or in=vivo morphogenic-stimulating agent bone loss or increase, used for treating bone fractures, pos or senile osteoporosis, hyperparathyroidism etc.
                                                                                                                                              Recombinant hetero-dimeric BMP proteins defects, healing bone injury and in wour
                                                                                                                                                                                                                           N-PSDB;
                                                                                                                                                                                                                                                         WPI; 1993-167696/20.
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13-SEP-1993
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                                                                                   Disclosure; Fig 3; 169pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR36734 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 108-110; 162pp; English
                                                                                                                                                                                                                                                                                                                                                                       (GEMY ) GENETICS INST INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                431 AA;
                                                                                                                                                                                                                                                                                                              Wolfman NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
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92US-00864692
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     the human bone morphogenetic protein BMP-7. It n. of a recombinant heterodimeric protein having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                 wound -
                                                                                                                                              are user
                                                                                                                                                                      useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                            treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ent - to prevent post-menopausal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a method for
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bone stimulating activity. This heterodimer comprises BMP-2 or BMP-4

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AAR54935
ID AARE
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AC AARE
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-NOV-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morphogenic protein; hOP-1-PP; OP-1; hOP1; hOP-1; tissue morphogenesis; osteogenic protein.
                                                                                                           A morphogenically active protein MOP-3 -morphogenesis in mammals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAY-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteogenic protein hOP1-PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
15-OCT-1994
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                                                                                                                                                                                                                                                                                                                                          Oppermann H,
Cohen CM;
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(first entry)
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93US-00029335.
93US-00040510.
                                                                                                                                                                                                                                                                                                                                                                              Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93WO-US010520
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         INC
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                                                                                                                                                       inducing tissue
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Disclosure; Page 119-121; 164pp; English

Sequence

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ARRESULT 111
ARRESTAT 112
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Best Local S
Matches 20
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16-SEP-1992;
04-MAR-1993;
31-MAR-1993;
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                                                                               This sequence is the pro form of human osteogenic protein hOP1. The mature hOP1 and proteins having at least 70% homology with it are preferred morphogens for inclusion in new morphogen-enrished nutritional formulations. The formulations are dietary compositions suitable for geople at risk for tissue damage due to protein energy malnutrition or to altered metabolism function and infant formulations to enhance tissue development in an infant or juvenile. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                      Morphogen enriched dietary compositions and infant formula - capable of enhancing tissue morphogenesis, development and viability, e.g. in infants, aged individuals and metabolic disorders, e.g. anorexia nervosa,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human osteogenic protein; hOP1; morphogen; infant food tissue morphogenesis; tissue development; bone growth; morphogen-enriched nutritional product.
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                                                                                                                                                                                                                                                                                                          Claim 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JUL-1993;
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25-AUG-1994
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                                                           development PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CREA-) CREATIVE BIOMOLECULES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             osteogenic pro-protein hOP1.
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                                                                                                                                                                                                                                                                                                          Page 110-112; 160pp; English
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92US-00946235.
93US-00029335.
93US-00040510.
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Pred. No. 1.8e-06;
Mismatches 0;
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3, AAR54937)
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ARESULT 112
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AXX 25-MAR
DT 25-MAR
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XX 0P-1;
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Best Local :
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04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                          Morphogens comprising an amino acid sequence sharing at least 70% homology with OP-1, OP-2, CBMP2, BMP3(fx), Vg1(fx), Vgr(fx), DPP(fx), GDF -1(fx), 60A(fx) and at least 80% homology with BMP5(fx) and BMP6(fx) are useful for maintaining the integrity of the gastrointestinal tract luminal lining in a mammal, including (1) limiting epithelial cell proliferation, (2) inhibiting ulcerative lesion formation, (3) inhibiting inflammation normally associated with ulcerative diseases, and/or (4) stimulating the repair of ulcerative lesions and the regeneration of the luminal tissue. Morphogens having at least 60% homology with residues 43-139 of mature hopel are included (claim 37-39). (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP-1; OP-2; CBMP2; Vgl(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP5(fx); BMP5(fx); Osteogenic protein; morphogen; morphogenic protein; gastrointestinal tract; luminal lining; epithelial cell; proliferation; ulcer; lesion; inflammation; regeneration; tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Maintaining integrity of gastrointestinal lining using a morphogen (stimulant) - for treating or preventing ulceration, also to inhibit endothelial cell proliferation and reduce side effects of cancer the
                                                                                                                                                                                                                Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1994-118121/14.
N-PSDB; AAQ45116.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human OP-1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 35-36; Page 102-104; 151pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CREA-) CREATIVE BIOMOLECULES INC
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386
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                                                                                                         20;
                                                                                                                                   Similarity
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                                                INPETVPKPCCAPTQLNAIS
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Ozkaynak
                                                                                                         Conservative
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93US-00029335.
93US-00040510.
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                                                                                                                                Score 111; DB 2;
Pred. No. 1.8e-06;
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                                                                                                            Mismatches
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CC AAQ72703 encodes AAR51644 human osteogenic protein 1 (hOp1), fragments of CC this protein consisting of residues 335-431, 316-431, 293-431, 300-431, CC 313-431, 315-431 and 316-431, are unglycosylated osteogenic polyeptides. CC Any two of these polypeptides can be disulphide bonded to form a dimer, CC which forms an essential component of an osteogenic protein. This protein CC is dispersed in a biodegradable matrix which can be implanted into a manualian bone matrow cavity, here it can induce local cartilage, bone CC and endochondrial bone formation; and it can also accelerate allograft repair. This implant has the advantage of inducing all stages of bone CC repair. This implant has the advantage of inducing all stages of bone CC formation and of having a higher specific activity than other known CC biosynthetic materials. The implant can be used to repair non-union CC fractures and cartilage, treat osteoarthritis; and aid in periodontal, CC dental or craniofacial reconstruction. (Updated on 015-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-AUG-1990;
07-SEP-1990;
18-OCT 1990;
18-OCT 1990;
21-NOV 1990;
04-DEC 1990;
04-DEC 1990;
04-DEC 1990;
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01-JUL-2002
08-JUN-1995
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23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                        Implantable device for inducing osteogenesis - comprises porous matrix contg. non-glycosylated dimeric, di:sulphide linked osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          non-union fracture repair; allograft repair;
cartilage and endochondrial bone formation;
periodontal, dental and craniofacial reconst
                                                                                                                                                                                                                                                            Claim 15; Col 63-68; 128pp; English
                                                                                                                                                                                                                                                                                                                                                        WPI; 1994-324521/40.
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(revised)
(first en
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91US-00810560.
92US-00827052.
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90US-00621849.
90US-00621988.
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89US-00315342.
89US-00422613.
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                                                                                                                                                                                                                                                                                                                                                                                       Ozkaynak E,
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Best Local
                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                             Binding p
                                                                                                                                                                                            The osteogenic protein is produced recombinantly in mammalian cell cultures, and may be provided to a site for bone induction in a mammal with a suitable matrix to allow infiltration, proliferation and differentiation of migrating progenitor cells. (Updated on 25-MAR-2003 correct PN field.)
                                                                                                                                                                                                                                                                                                                          osteogenic protein - for differentiating between complexed forms of the protein in culture media
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sampath
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                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                            Disclosure; Page 46-47; 70pp; English
                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1994-302971/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-MAR-1993;
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30-MAR-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CREA-) CREATIVE BIOMOLECULES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-SEP-1994.
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                                                                                                Similarity
20; Conserv
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                                                                                                                                                                                                                                                                                                                           partners, esp. antibodies, specific for different forms nic protein - for differentiating between mature and solved forms of the protein in culture media or serum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                          INPETVPKPCCAPTQLNAIS 20
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                                                                                                  Conservative
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(first entry)
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293. .4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             X,
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                                                                                                                100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tucker RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "mature seguence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "proteolytic cleavage site"
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                                                                                              Score 111; DB 2;
Pred. No. 1.8e-06;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oppermann H,
                                                                                                                               Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ozkaynak
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                                                                                                                                                                                                                                                                                                                                              orms of
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                                                                                                Gaps
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                                                                                                  Query Match
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Matches 20
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386

INPETVPKPCCAPTQLNAIS INPETVPKPCCAPTQLNAIS 20; Similarity

100.0%; ilarity 100.0%; Conservative 0

0

20 405

Score 111; DB 2; Pred. No. 1.8e-06; Mismatches 0;

Length 431; Indels

0

Gaps

0

Sequence 431

AA;

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This sequence represents the human hippocampus derived protein, according to the invention for improving survival of neural cells. Morphogens such as this, can be used to treat (protect) cells which have suffered comercial or mechanical injury, eg. transected nerves; demyelinated cells; cells exposed to toxins such as ethanol, and cells at risk because of neuropathies (such as Parkinsons and Alzheimers diseases; Huntingtons con feedls can be in the central or peripheral nervous systems. When used to induce redifferentiation, morphogens such as this, are used to trisk cells can be in the central or peripheral nervous systems. When used to induce redifferentiation, morphogens such as this, are used to treat neuroblastoma and then induce formation of neurite outgrowths, cell aggregation and/or cell adhesion. These proteins stimulate complete axonal nerve regeneration, including vascularisation and reformation of the myelin sheath. Nerves can be regenerated over long distances, eg. cor 55-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct correct PN field.) (Updated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-JUL-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      numan; nippocampus; osteogenic protein; OP-1; hOP-1; mature; injury; survival; neural cell; morphogen; chemical; mechanical; neuropathy; transected nerves; demyelinated cell; toxin; ethanol; Parkinsons; Alzheimers; Huntingtons chorea; amylotrophic lateral sclerosis; multiple sclerosis; neoplastic lesion; central nervous system; CNS; retinoblastoma; glial cell neoplasm; redifferentiation; neuroblastoma; peripheral nervous system; neurite; outgrowth; cell aggregation; cell adhesion; axonal, nerva reconcertion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Using morphogens to improve survival of neural cells - also stimulating re-differentiation in transformed cells and prodn. of adhesion molecules, for treating traumatic injury, neuropathy and nerve cell cancers, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rueger DC,
Cohen CM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 23; Page 122-124; 176pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1994-065399/08.
N-PSDB; AAQ56231.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9403200-A1
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02-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUL-1993;
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25-MAR-2003
field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
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93US-00029335.
93US-00040510.
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RESULT 116
AAR50236
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                                                Query Match
Best Local S
Matches 20
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04-MAR-1993;
31-MAR-1993;
                                                                                                                                       Morphogens comprising an amino acid sequence sharing at least 70% homology with OP-1, OP-2, CBMP2, Vgl(fx), Vgv(fx), Dpf(fx), GDF-1(fx), 60A(fx) are useful for maintaining liver function in a mammal, including means for regenerating lost or damaged hepatic tissue, means for enhancing viability and integration of hepatic tissue and organ transplants, and means for correcting liver function deficiencis, including means for enhancing diminished liver function due to tissue injury or disease. Morphogens having at least 60% homology with residues 43-139 of mature hOP1 are included (claim 43-44). Use of BMP3(fx), are included in the disclosure. (Updated on 25-MAR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OP-1; OP-2; CBMP2; Vgl(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); SMP6(fx); osteogenic protein; morphogen; morphogenic protein; liver; regeneration; injury; cancer; integral transplant; gene therapy; hepatic tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR50236 standard; protein; 431
                                                                                                                                                                                                                                                                                                             Use of morphogen(s) to induce liver regeneration - for treatment of cancer etc., also to improved integration tissue, in gene therapy etc. .
                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath T, i
Ozkaynak E, Smart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR50236;
                                                                                                   Sequence 431
                                                                                                                                                                                                                                                                                       Claim
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N-PSDB; AAQ45162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                               (CREA-) CREATIVE BIOMOLECULES
                                                                                                                            to correct PN field.)
 386
                                                                                                                                                                                                                                                                                     42-42; Page 125-127; 176pp; English.
                                                   20;
                        Н
                                                                Similarity
                          INPETVPKPCCAPTQLNAIS 20
                                                 100.0%; ilarity 100.0%; Conservative
                                                                                                    ĀΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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93US-00029335.
93US-00040510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers 335. .431
                                                                                                                                                                                                                                                                                                                                                                                                        Rueger DC,
t JE;
                                                   0
                                                Score 111; DB 2;
Pred. No. 1.8e-06;
Mismatches 0;
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 405
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                                                                          Length 431;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer; integration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human OP-1,
                                                                                                                                                                                                                                                                                                                            repair of injury, of transplant
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RESULT 117

25-MAR-2003

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RESULT 118
AAR47250
ID AAR472
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AC AAR472
XX
DT 25-MAR
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AAR57971

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Best Local Sim
Matches 20;
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04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Morphogens comprising an amino acid sequence sharing at least 70% homology with OP-1, OP-2, CBMP2, Vglffx), Vgr(fx), DPP(fx), GPP-1(fx), 60A(fx) and at least 80% homology with MP3(fx), MP5(fx) and BMP6(fx) are useful for integrating an implanted tooth in a tooth socket and for inhibiting tissue loss associated with periodomtal disease or injury. Morphogens having at least 60% homology with residues 43-139 of mature hOP1 are included (claim 30-32). (Updated on 25-MAR-2003 to correct PN hOP1 are included (claim 30-32).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Op-1; Op-2; CBMP2; Vg1(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); BMP6(fx); tooth socket; alveolus; osteogenic morphogen; morphogenic protein; periodontal tissue; regeneration; tooth implant; integration; inhibition.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                    AAR47250;
                                                                                                        AAR47250
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               with periodontal disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Morphogen-induced periodontal tissue regeneration - used in integrating as implanted tooth in tooth socket or to inhibit tissue loss associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAQ67311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1994-118107/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuberasampath T, Ru
Smart JE, Ozkaynak
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11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               field.)
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                                                                                                                                                                                                                                      386
                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           431
                                                                                                        standard;
                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                   100.0%;
ilarity 100.0%;
Conservative 0
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(first entry)
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93US-00029335.
93US-00040510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers 335. .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            claim 30-32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "amino acids 43-139 of mature human OP-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rueger DC,
ak E;
                                                                                                     protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or injury.
                                                                                                                                                                                                                                                                                                                                         0
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Pred. No. 1.8
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                           DB 2;
L.8e-06;
s 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cohen CM,
                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pang
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                                                                                                                                                                                                                 This sequence represents the human hippocampus derived protein, costeogenic protein, O-Pi. The mature OP-1 protein was used as at least one subunit in the dimeric protein of the invention. This dimeric protein comprises a pair of protein subunits which are associated to give a structure with morphogenic activity. Each subunit comprises more than 100 amino acids having a pattern of cysteine residues characteristic of the morphogen family. Each subunit comprises a mature form of a subunit of a member of the morphogen family, non-covalently complexed with a peptide comprising a pro-region of a morphogenic family member, to form a complex more soluble in aqueous solvents than the uncomplexed subunits. The containing a symptom-alleviating co-factor. The protein and corresponding containing as symptom-alleviating co-factor. The protein the amount of mature and soluble forms of morphogenic proteins produced. (Updated on CC 25-MAR-2003 to correct PN field.)
                                                                                                                                       Matches
                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-JUL-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; hippocampus; osteogenic protein; Op-1; subunit; dimer; morphogenic activity; cysteine; morphogen; family; pro-region; complex; soluble; aqueous solvent; therapeutic composition; symptom-alleviating; co-factor; antibody; diagnosis; assay; quantitate; mature.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morphogenic mammals and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 3; Page 60-63; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jones WK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-JUL-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                           Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CREA-) CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-AUG-1994
                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1994-065689/08
DB; AAQ56198.
                                                                                  386
                                                                                                           μ
                                                                                                                                      l Similarity
20; Conserv
                                                                                                           INPETVEKECCAPTOLNAIS
                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tucker RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein soluble complex - for diagnosing tissue disorders.
                                                                                                                                    100.0%; ilarity 100.0%; Conservative 0;
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93US-00029335.
93US-00040510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "Pref. Pro-region,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rueger DC, Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Pref. Pro-region, Claim
                                                                                                                                    Score 111; DB 2;
Pred. No. 1.8e-06;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INC
                                                                                  405
                                                                                                           20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        regeneration
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                                                                                                                                                               Length 431;
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                                                                                                                                       Gaps
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RESULT 120
AAW00236
ID AAW002
XX
AC AAW002
XY
DT 21-NOV
DT 21-NOV
DX
XX
Morpho
XX
Morpho
XX
Morpho
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Homo s
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FH Key
FH Rey
FT Peptid
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                           Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dijke PT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9530003-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-FEB-1996
                                                                     morphogenesis;
                                                                                  Morphogen;
                                                                                                                                         21-NOV-1996
                                                                                                                                                                   AAW00236;
                                                                                                                                                                                               AAW00236 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-APR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
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                                                                                                                                                                                                                                                                   386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                       20;
                                                                     osteogenic protein; dentine;
sis; odontoblast; OP-1.
                                                                                                                                      (first entry)
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RESULT 119
AAR85211
ID AAR852
XX

AAR85211 standard; protein; 431

8

Key Peptide

Location/Qualifiers
1. .29

tooth decay;

Homo sapiens

protein;

431 AA

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cDNA encoding the human osteogenic protein 1 (OP1) is given in AAT06038 The encoded protein (AAR85210) is used to isolate OP1 binding receptors ALK-2, ALK-3 and ALK-6 (see AAR85206, AAR85207, AAR85209, respectively)
                                                                                                                                                        Identifying osteogenic protein-1 receptor-binding analogue - useful the design of morphogen agonists and antagonists for therapeutic, diagnostic and experimental purposes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human osteogenic protein 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR85211;
                                                                                                                                      Claim 12; Page 78-80; 95pp; English.
                                                                                                                                                                                                 WPI; 1995-393076/50.
N-PSDB; AAT06038.
                  1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                 CREATIVE BIOMOLECULES :
                                               Similarity
INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                              Miyazano K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          receptor; osteogenic protein 1; morphogenesis; morphogen;
                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                94US-00236428
                                                                                                                                                                                                                                                                                                   95WO-US005467
                                                                                                                                                                                                                                                                                                                                                            /label= C-terminal_cysteine_domain
                                                                                                                                                                                                                                                                                                                                                                                                   /label=
                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                               100.0%;
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                                     0
                                               Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                            INC.
                                      Mismatches
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                                                         Length 431;
                                       Indels
                                       0
                                      Gaps
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RESULT 121
AAR87537
ID AAR875
XX AAR875
XX 15-OCT
XX Osteog
KW Osteog
KW articu
XX Homo s
XX Hom
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human hippocampus full-length osteogenic protein OP-1 (AAM00236) includes a pro-sequence and the morphogenically active mature protein sequence (see also AAW00221) that includes a 7-Cys C-terminal domain. OP-1 can be expressed from intact or truncated cDNA (AAT33441) in prokaryotic or eukaryotic host cells. Mature OP-1 and other morphogens (see also AAW00222-35) are used to induce dentine morphogenesis, to seal dental cavities and to desensitise teeth to pressure and/or temp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                                                     02-JUN-1995;
                                                                                                                                                                                                                                                                                 Osteogenic protein; OP-1; cartilage; bone; skeleton; joint;
                                                                                                                                                                                                                                                                                                                   Human osteogenic protein OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 50-52; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-1995;
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                                                             03-JUN-1994;
                                                                                                                                          14-DEC-1995
                                                                                                                                                                                WO9533502-A1
                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                            articular cartilage; replacement body part
                                                                                                                                                                                                                                                                                                                                                               15-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR87537 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cavities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Use of morphogen(s), e.g. osteo
inducing dentine morphogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; AAT33441.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9626737-A1
                       (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            386
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                               (first
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                                                             94US-00253398
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                                                                                                     95WO-US006724
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30. .292
                                                                                                                                                                                                                                                                                                                                                               entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                osteogenic proteins, on dentinal surfaces nesis, desensitising teeth or sealing tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              405
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RESULT 122
AAR85757
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                               Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacial; anomaly; skeletal; dental; endochrondral bone formation; non-union fracture; cartilage repair; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Device for in-vivo production of autogenous replacement body parts - comprises matrix coated with osteogenic protein, for infiltration of cells, partic. for replacement or repair of cartilage in skeletal joints.
                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hop-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
19-JUN-1996
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                            Peptide
                                                                                                                                                                                   Protein
                                                                                                                                                                                                                                                              Peptide
                                                                                                                                                                                                                                                                                                                         Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR85757
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                                                                                         Peptide
                                                                                                                                                    Peptide
                                                                                                                                                                                                                                                                                                                                                        Peptide
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20; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
ilarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(first entry)
                                         /label= OP7
/note= "hOP-1
Cys skeleton i
                                                                                          species, N-terminal 330. .431
                                                                                                 .18. .431
/label= OP1-16Val
/note= "N-terminally truncated
/note= "N-terminal residue is
                                                                                                                                                                                                                 /note= "N-terminally truncal
species, N-terminal residue
                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                              note=
                                                                                                                                                                                                                                                                                                                                           'note= "Prepro-peptide"
                                                                                                                                                                    note= "Mature hOP-1"
                                                                                                                                                                                                                                                                                                            note= "hOP-1 peptide,
                                                                                                                                                                                                    8, claim 3"
                                                                                                                                                                                                                                                label= OP1-18Ser
                label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein;
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                                                                                                                                                                                                                                                               .431
                             .431
                                                                                                                                                                                                                                                                              "hOP-1 peptide,
                OPS
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                                         protein species defining the conserved
in the active region, claim 1"
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        405
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protein
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                                                                                                                                                                                                                   residue is
species defining the
                                                                                                                                                                                                                                                                              claim 2"
                                                                                                                                                                                                                                                                                                             claim
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                                                                                                                                                                                                                 mature hOP-1
Ser, opt. des
                                                                                                         mature hOP-1 protein Val, claim 3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 431;
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                                                                                                                                                                                                                 re hOP-1 protein opt. designated
   conserved
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RESULT 123
AAW16365
ID AAW163
XX
AC AAW163
XX
                                                                                                                                                                                                                                                                                                    This sequence represents the human osteogenic protein, hOP-1 has CC homology with proteins in the TGF-beta superfamily. Fragments of the hOP-CC protein can be used in the production of dimeric peptides which may be used in the generation of antibodies with binding specificities for costeogenic proteins. The antibodies with binding specifically to an epitope of the osteogenic protein and may be used in purification protocols. Osteogenic proteins, such as hOP-1, may be used in an CC implantable osteogenic device which allows predictable bone formation to CC orrect acquired and congenital cranofacial and other skeletal or dealtal CC anomalies. They may be used to induce local endochrondral bone formation in non-union fractures and in other clinical applications including dental and periodontal applications where bone formation is required. Other potential applications include cartilage repair, e.g. in the treatment of osteoatrhritis. The cDNA encoding this sequence was isolated CC from human hippocampal tissue. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                      Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-APR.1988
15-AUG.1989
17-OCT 1989
17-OCT 1989
17-OCT 1999
22-FEB 1990
07-SEP 1990
18-OCT 1990
18-OCT 1990
18-OCT 1990
04-DEC 1990
04-DEC 1990
04-DEC 1990
22-FEB 1991
20-FEB 1991
28-JAN 1992
21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antibodies with osteogenic protein binding spurification of osteogenic proteins, and as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Col 63-68; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-010159/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rueger
                  AAW16365
                                                  AAW16365
                                                                                                                                                                                                                                                                         Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1993;
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                                                  standard; protein; 431
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90US-00599543.
90US-0060024.
90US-00616374.
90US-006218849.
90US-00621988.
91US-00660162.
91US-00820560.
92US-008270550.
92US-00841646.
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88US-00232630.
89US-00315342.
89US-00422613.
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90US-00483913.
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100.0%; Pj
ative 0;
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Pred.
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                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                      e 111; DB 2;
. No. 1.8e-06;
smatches 0;
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                                                                                                                                                                                                                                          431;
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RESULT 124
AAW40190
ID AAW401
XX
AAW401
AC AAW401
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DT 08-JUD
DX
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OSteos
KW Chrone
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                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                         This is the amino acid sequence of the human osteogenic protein 1 (OP1) derived from hippocampal tissue. The invention relates to a novel soluble form of this protein and of OP2 (AAW16366), and especially to ligands binding these proteins, e.g. poly- or monoclonal antibodies. The ligands are especially able to differentiate between the soluble and mature forms of these proteins. The soluble forms of the proteins preferably comprises the C-terminal 6 or 7 Cys residues (i.e. for OP1 residues 335-431 (6 Cys) or 330-341 (7 Cys)). The soluble complex comprises a pro domain of the protein non-covalently linked to a dimeric form of the osteogenic protein which containing at least the soluble part of OP1 and another osteogenic protein e.g. OP2, bone morphogenetic protein (BMP)-2, -3, -4, -5, -6 or -9. The ligand may be used to monitor the purity of therapeutic osteogenic protein preparations and for diagnostic purposes. (Updated on 25-MAR-2003 to correct PF field.)
Osteogenic protein; OP-1; bone morphogenic protein; OP/BI chronic renal failure; renal therapeutic agent; disease; nephropathy; glomerulopathy; hypertrophy; sclerosis; nepi dysplasia; fibrosis; glomerular filtration rate; GFR.
                                                                                   Human OP-1
                                                                                                                        08-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antibody specific for soluble form control and diagnostic use.
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04-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; osteogenic protein; hippocampus; soluble; ligand; antibody;
mature; non-covalent; dimeric; bone morphogenetic protein; purity;
                                                                                                                                                      AAW40190
                                                                                                                                                                                         AAW40190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Col 19-22; 20pp; English.
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26-AUG-1997
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20; Conserv
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                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS
                                                                                   protein.
                                                                                                                                                                                                                                                                                                                                           100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 1.8e-06; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                AA;
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(first en
                                                                                                                      (first
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93US-00027070.
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                                                                                                                                                                                       protein;
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                                                                                                                                                                                         431
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                                                                                                                                                                                                                                                                                                                                                                             Length 431;
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                                                  OP/BMP
                    nephritis;
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RESULT 125
AAW3683
ID AAW368
AC AAW368
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XX 25-MAR
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XX Eull 1
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XW arthri
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                              This sequence represents the human osteogenic protein, OP-1. This protein is used in a method for the treatment of a mammal having, or at risk of, chronic renal failure which comprises administering an osteogenic protein/bone morphogenetic protein (OP/BMP) renal therapeutic agent or morphogen. The method can be used for treating e.g. chronic renal failure, end-stage renal disease, chronic diabetic nephropathy, diabetic renal hypertrophy, hypertensive nephrosclerosis, hypertensive glomerulosclerosis, chronic glomerulonephritis, hereditary nephritis, renal dysplasia, or a patient afflicted with e.g. glomerular hypertrophy, tubular hypertrophy, glomerulosclerosis, tubulointerstitial sclerosis or renal fibrosis. Such therapeutic agents can prevent, inhibit or delay the progressive loss of functional nephron units and the progressive decline in glomerular filtration rate (GFR) which slowly but inevitably leads to the need for renal replacement therapy
               Human osteogenic protein; OP; OP-1; morphogen; morphogenic protein; embryogenesis; organ maintenance; tissue-specific morphogenesis; arthritis; emphysema; osteoporosis; cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treatment of chronic renal failure - using an morphogenetic protein renal therapeutic agent mesenchymal progenitor cells.
                                                                       Full length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-NOV-1997.
                                                                                                     25-MAR-2003
10-MAR-1998
                                                                                                                                                                           AAW36853 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                     Sequence 431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CREA-) CREATIVE BIOMOLECULES INC
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                                                                                                                                                                                                                                                     386
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                                                                                                                                                                                                                                                                                                             l Similarity 100.
20; Conservative
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                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                         sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Page 55-56; 113pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cohen CM;
                                                                                                     (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'label= signal
                                                                                                                                                                                                                                                                                                                         100.0%;
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                                                                         human osteogenic protein 1 (hOP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            propeptide
                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                             Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     osteogenic protein/bone or morphogen or renal
                                                                                                                                                                                                                                                                                                                                           Length 431;
                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                               Gaps
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RESULT 126

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                                                                                                                               The present sequence represents a human osteogenic protein-1 (hOP-1). hOP class first found in bone tissue, and is now known to be produced at CC relatively high levels in cells derived from renal or adrenal tissue. OP-CC 1 proteins are a group of morphogenically active proteins. Morphogens are CC considered with other morphogens (e.g. AAW36854-62). Comparison of the CC amino acid sequences of these morphogens has identified a consensus 6-7 CC cysteine motif at the C-terminal Morphogens is identified a consensus 6-7 CC cysteine motif at the C-terminal Morphogens is in tissue and CC corgan maintenance and repair in mammals. They induce a developmental CC cascade of tissue-specific morphogenesis, but also in tissue and CC expression of a cellular gene encoding a naturally occurring morphogenic CC expression of a cellular gene encoding a naturally occurring morphogenic CC express the cellular gene, and after a period of time the epithelial CC cells are assayed for the presence of or the amount of the protein CC expressed by the cellular gene. A change in the level of the morphogenic CC protein relative to the level in the epithelial cells in the absence of CC the candidate compound is indicative of the amount of the protein CC modulate expression of the cellular gene. The method can be used to CC entity compounds which can increase or decrease morphogen production or centrify compounds can be used in the treatment of, e.g. arthritis, CC emphysema, osteoporosis, kidney disease, lung diseases, cardiomyopathy, CC and cirrhosis of the liver. (Updated on 25-MAR-2003 to correct PR field.)
                                                                            Query Match
Best Local :
                                                              Matches
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30-AUG-1991;
28-AUG-1992;
                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Screening for compounds which modulate morphogen expression incubating in the presence of epithelial cells which contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-384665/35.
N-PSDB; AAT97877.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Col 49-52; 49pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CREA-) CREATIVE BIOMOLECULES INC
386
                                                              20;
                                                                                Similarity
                                                                                                                               431
                          INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             morphogenic protein
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                                                                Conservative
                                                                                                                               AA;
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91US-00752764.
91US-00752861.
92US-00938021.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers 30. .292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note= "conserved 7 Cys skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note= "mature protein"
                                                                            100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression.
                                                                              Score 111; DB 2;
Pred. No. 1.8e-06.
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                                                                  Mismatches
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                                                                                                 DB 2;
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                                                                                              Length 431;
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INPETVPKPCCAPTQLNAIS
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Query Match Best Local S Matches 20

l Similarity 20; Conserv

Conservative

0

Score 111; DB 2; Pred. No. 1.8e-06; Mismatches 0;

Length 431; Indels

0

Gaps

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0

RESULT 128 AAW53179

100.0%;

Sequence 431

AA,

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The present sequence is human osteogenic protein 1 (OP-1), a novel CC analogue of which binds the human, cell surface receptor, activin CC responsive cell to antagonise OP-1 binding, or the induction of OP-1 CC mediated cell responses. Typical uses include the inhibition of CP-1 CC uncontrolled differentiated tissue growth, e.g. in osteosarcoma or CC uncontrolled differentiated tissue growth, e.g. in osteosarcoma or CC cachieved with soluble forms of ALK-1, or an OP-1 responsive cells is CP rovided that the analogue is at least 60% homologous to residues 335 to CC grovided that the analogue is at least 60% homologous to residue 335 to CC analogue include affinity purification and quantification of OP-1 and CC analogues, or determination or quantification of ALK-1. ALK-1 can be conceptors or cell surface molecules, can be used to screen for ligands that modulate endogenous morphogen receptor receptors or cell surface molecules, can be used similarly and in gene CC therapy, or in combination with a specific morphogen agonist, to condicate proliferation and differentiation of implanted cells, i.e. nonceptor condication dentify other OP-1 specific receptors, and their tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Analogue of osteogenic protein-1, receptor complex and used to inhibit effects of OP-1 on responsive cells, e osteo:sarcoma and Paget's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; cell surface; receptor; activin; kinase; ALK-1; osteogenic; protein; OP-1; analogue; antagonist; agonist; inhibition; tissue growth; osteogracoma; Paget's disease; activin; bone; morphogenic; BMP-4; affinity purification; quantification; diagnosis; osteoporosis; aplastic bone disease; osteopaenia; ostopenia; determination; screening; ligand; modulation; morphogen; gene therapy; stimulation; proliferation; differentiation; probe; identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ichijo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-AUG-1996;
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RESULT 127
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                                                                                                                                                                                                                                                                             This sequence represents the human osteogenic protein-1 (OP-1), and can be used in the method of the invention. The method is for enhancing recovery of central nervous system (CNS) function in a mammal afflicted with a CNS injury selected from ischaemia or trauma, and comprises: (i) administering a tissue specific morphogenesis inducing dimeric protein comprising: (a) a pair of folded polypeptides having at least 70% homology to the carboxy terminal 7-cysteine domain of OP-1 (also known as bone morphogenic protein 7 (BMP-7)); (b) a pair of folded polypeptides combined generic Sequence 7, 8, 9 or 10; or (ii) administering human or mouse OP-1 or OP-2 (also known as BMP-8), GDF-1, BMP-2A, BMP-2B, BMP-3, BMP-5, BMP-6, 60A (Drosophila BMP-7 analogue) DPP (Drosophila BMP-2A analogue), Vgl or Vgr-1, or a conservative substitution variant. The generic sequences were constructed to accommodate the homology to all of the proteins in part (ii) of the method. The method can be used to treat mammals whose CNS tissue had been damaged or lost due to stroke or a similar disruption in blood flow, or due to infliction of physical (e.g. mechanical) trauma affecting the CNS
                                                                                            Matches
                                                                                                                        Query Match
Best Local
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llarity 100.0%;
Conservative (
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Pred. No. 1.8e-06;
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This is a human osteogenic protein (hOP)-1 sequence. The osteogenic CC proteins are morphogenically active proteins and can be used in a method cfor identifying an epithelial cell tissue source in which the expression cf a cellular gene encoding a protein comprising a naturally occuring cfor plypeptide can be modulated with a compound shown to modulate gene expression. The method comprises incubaring the epithelial cells with the compound until expression of the cellular gene has been modulated. CC Assaying for the polypeptide where the change in the level of the polypeptide relative to the level in the epithelial cells incubated compound indicates a epithelial cell tissue source in which the expression of the cellular gene is modulated. The polypeptide, when the expression of the cellular gene is modulated. The polypeptide, when climerised, has the property of inducing a developmental cascade of tissue specific morphogenesis. The polypeptide sequence can be selected from how the compound protein (mOP)-1, hOP-2, mOP-2, prosophila concepts gene product (DPP), Xenopus Vgl, murine Vgr-1, human CBMP captering or naturally continue variants
                         Query Match
Best Local Similarity
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30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
20-JUL-1994;
                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method for identifying an epithelial cell tissue source which contains a cellular gene for morphogenic protein expression - by incubating at least two preparations of epithelial cells with a compound shown to modulate morphogenic gene expression.
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Rueger DC, Smart
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91US-00752764.
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                                                      Score 111; DB 2;
Pred. No. 1.8e-06;
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  Sequence 431
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20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
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04-DEC-1990;
04-DEC-1990;
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20-AUG-1990;
07-SEP-1990;
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17-OCT-1989;
17-OCT-1989;
WPI; 1998-158353/14.
N-PSDB; AAV15204.
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                                     Pang RHL,
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                                                                  STRYKER CORP.
                                     Rueger DC,
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90US-00621849.
90US-00621988.
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91US-00810560.
92US-00827052.
92US-00841646.
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                                       Oppermann
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                                        Ozkaynak
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for novel protein(s) Extraction of osteogenic protein from mixture - using antibodies specific for novel polypeptide chains useful as subunit(s) of dimeric osteogenic

Disclosure; Col 65-68; 127pp; English

The present sequence represents human osteogenic protein OP1, which is used in the present invention. The present invention describes methods for selectively extracting an osteogenic protein (OP) from a mixture. The method comprises: (a) exposing the mixture to an antibody that specifically binds OP, separating the resulting antibody-protein complex from the mixture, and dissociating the complex. In the methods OP comprises a pair of oxidised subunits that are disulphide-bonded to form a dimer, and one of the subunits has an amino acid (aa) sequence sufficiently homologous to residues 335-431 of a 431 aa protein designated OPS, sequence given in the specification. In dimeric form OP is capable of inducing cartilage and endochondral bone formation in a mammal when disposed within a matrix implanted in the mammal. The methods are used for recovering the recombinant proteins from cell cultures

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RESULT 132
AAW48910
ID AAW489
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DT 28-SEP
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RESULT 131
AAW80749
ID AAW807
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AAW80749 standard; protein; 431 AA

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Matches Query Match Best Local

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The osteogenic protein is used, along with a matrix derived from a non-synthetic, non-polymeric material and a binding agent, to create a device for inducing local formation of bone or cartilage. The devices are used for local repair of bone, cartilage and osteochondral defects (e.g. (non-critical size, segmental non-union, osteochondral or subchondral defects, or non-union fractures) and induces formation of endochondrial bone or articular cartilage. Particular applications are in repair of degenerative/deteriorative conditions (e.g. osteochondrits dessicane); in conditions requiring much reconstructive surgery; prosthesis repair; spinal fusions; scoliosis; carnial/facial repair and massive allograft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; osteogenic protein; bone; cartilage; osteochondral defect; endochondrial bone; articular cartilage; prosthesis repair; spinal fusion; scoliosis; allograft repair.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1998-520968/44.
DB; AAV60227.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for inducing growth of bone and cartilage containing osteogenic n - formulated with non-synthetic, non-polymeric matrix and bind produces stable repairs with only small doses of protein.
                                                                                                         l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INPETVEKECCAPTQLNAIS 20
                                                              INPETVPKPCCAPTQLNAIS 20
                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tucker MM,
                                                                                                           Conservative
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                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 2;
100.0%; Pred. No. 1.8e-06;
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                                                                                                       Score 111; DB 2;
Pred. No. 1.8e-06;
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                                    405
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                                                                                                                                                Length 431;
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                                                                                                             0
                                                                                                                                                                                                                                               밁
                                                                                                                             Ś
                                                                                                                                                                                                                                                                                              Criming is the amino acid sequence of human osteogenic protein (OP1). A Claimed method of inducing bone formation sufficient to fill a defect comparison of inducing bone formation sufficient to fill a defect comparison of the comparison of the locus, an osteogenic convice comprising an osteogenic protein dispersed in a biocompatible, non-rigid, amorphous carrier having no defined surfaces. Suitable osteogenic convicting include OP1, OP2, bone morphogenetic proteins 2, 3, 4, 5, 6, 7, 8, 9, 9, 9, 11, 12, 15, and 3b, DPP, Vgl. Vgr. 60A, and GDF 1, 3, 5, 6, 7, 8, 9, 9, 10 or 11. A claimed method for enhancing the quantity or quality of callus formation at an osteogenic defect locus in a mammal involves callus formation at an osteogenic defect locus in a mammal involves coloromation in non-rigid amorphous carrier having no defined surfaces. CC The osteogenic protein is selected from OP1 or OP2 (see AAW80750 for CC generic sequence), or proteins defined by the generic sequences given in AAW80751-53. The devices may be used for repairing bone, cartilage and/or costeochondfal defects. They are able to fill critical size defects and enhance the quality of bone confined by the generic sequences and confined surfaces.
                                                                                                                                                                      Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPF; 1998-542236/46.
N-PSDB; AAV65199.
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Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Inducing or accelerating bone formation in defects - using an osteogenic protein alone or dispersed in a non-rigid, amorphous carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-1997;
29-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-FEB-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Osteogenic protein; osteogenic device.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW80749;
                                                                                                                                                                                                                                               Sequence 431
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AAW48910
                                                                                                                                                                                                                                                                                     injectable composition
                                                                                             386
                                                                                                                                                                        20;
                                                                                                                                                                                          Similarity
                                                                                                                   INPETVPKPCCAPTQLNAIS
standard;
                                                                                             INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 63-64; 79pp; English.
                                                                                                                                                                      100.0%; ilarity 100.0%; Conservative 0.
                                                                                                                                                                                                                                                 A
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97US-0047909P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "7-cysteine domain"
protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OP1; human; bone morphogenetic protein; morphogen;
  431
                                                                                                                                                                        0
                                                                                                                                                                        Score 111; DB 2;
Pred. No. 1.8e-06;
); Mismatches 0;
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  B
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RABSILT 130
RAW713
AC JAW713
AC AAW713
AC AAW7

protein

20-MAR-1997; 20-MAR-1998; 24-SEP-1998. WO9841246-A2 Homo sapiens

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                                                                                                                             Matches
                                                                            Query Match
Best Local
                                                                                                                                                                                  produce replacement tissue. A preferred morphogen is the claimed seven-
cysteine domain of human OP-1. The method is used to treat disorders of
eye, ear or nose, especially ophthalmic tissue which has been damaged,
surgically, accidentally, as a result of exposure to cold, light,
chemicals etc., by pathogens or by degenerative disorders (specifically
cataracts, scotomata, glaucoma, photophobia or night blindness).

Especially the morphogen: (a) promotes regeneration of damaged retina or
cornea; (b) prevents retina from becoming anergic; (c) causes regression
of neovascularisation by inhibiting angiogenesis; (d) induces meurite
extension in retinal cells; (e) normalises intraocular pressure and light
transmittability in transparent eye tissue; (f) maintains accommodation
(prevents loss of lens elasticity); (g) accelerates integration of
                                                                                                                                                                                                                                                                                                                                                                              This polypeptide comprises human hippocampus osteogenic protein (OP-1) claimed method of preserving or restoring a placode-derived sense perception organ of neuroectodermal origin (especially an eye, nose or ear) in a vertebrate involves providing a morphogen to the organ or alternatively providing morphogen-stimulated progenitor cells (PC) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Preserving or restoring percipient function of eye, ear for, e.g. treating ophthalmic disorders such as macular glaucoma, cataract or retinal detachment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OP-1; osteogenic protein 1; human; morphogen; sense perception; cataract; scotomata; glaucoma; photophobia; night blindness; retinal detechment;
                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 6; Page 74-75; 130pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sjorgen's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic protein 1
                                                                                                                                                        treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-NOV-1996;
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                                                                                                                                                                           prostheses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-MAY-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998-297606/26.
 386
                                <u>ب</u>
                                                             l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>점</u>,
                                                                                                                                                       s loss of lens elasticity); (g) accelerates integration of es, and (h) maintains lachrymal gland function (specifical Sjorgen's syndrome) (all claimed)
 INPETVEKECCAPTOLNAIS 405
                                INPETVPKPCCAPTQLNAIS 20
                                                                                                                             431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                syndrome
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-00751227
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= Seven-cysteine_domain
/note= "(Claim 6)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 label = Pro_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 label= Sig_peptide
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                                                                            100.0%;
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                                                             0
                                                                          Score 111; DB 2;
Pred. No. 1.8e-06;
                                                              Mismatches
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                                                                                           Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or nose - use
degeneration,
                                                              0
                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (OP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful
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AAW59764
IID AAW5
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XX AC AAW5
XX AC AAW5
XX MOIJ
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RESULT 134
AAY17391
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RESULT 133

Matches Query Match Best Local This is the amino acid sequence of the morphogenically active oestrogenic protein-1 (OP-1), used in the method of the invention to treat symptoms of sensory perception deficit. This maintains, and restores or preserves sensory perception. Specifically OP-1 is used in cases of hearing loss caused by loss of sensory hair cells, e.g. as a result of treatment with aminoglycoside antibiotics, cisplatin or sound. More generally it can be used in human or veterinary medicine to treat any neural tissue injury or neuropathy. Typical of many examples are corneal wounds, ophthalmic neovascularisation, macular degeneration, torn retina or ophthalmic inflammation. The function of OP-1 may be replaced by an agonist Human; osteogenic protein; OP-1; OPX; morphogen; stroke; neuronal cell loss; Alzheimer's disease; Parkinson's disease; Huntington's disease; senile dementia; alcohol-induced dementia Treating symptoms of sensory perception deficit using morphogen(s) useful for, e.g. maintaining, restoring or preserving sensory hair Morphogen; oestrogenic protein-1; OP-1; sensory perception deficit; hearing loss; sensory hair cell; aminoglycoside antibiotic; cisplatin; human; ophthalmic neovascularisation; macular degeneration; torn retina; ophthalmic inflammation; agonist. AAY17391 standard; protein; 431 Sequence 431 AA; Claim 2; N-PSDB; Sampath K, AAW59764 standard; protein; 431 22-JUL-1999 15-NOV-1996; 14-NOV-1997; 22-MAY-1998. WO9820890-A1. Homo sapiens 26-OCT-1998 AAW59764; Morphogenically active oestrogenic protein-1 (CREA-) CREATIVE BIOMOLECULES INC 1998-297607/26. DB; AAV41572. 386 INPETVPKPCCAPTOLNAIS 405 20; μ Similarity Page INPETVPKPCCAPTQLNAIS 20 Rueger DC, Conservative (first entry) (first entry) 62-63; 82pp; 96US-00751227. 97WO-US020743 protein OP-1. 100.0%; Cohen English. 0; Score 111; DB 2; Pred. No. 1.8e-06; Ğ Mismatches Charette Œ, Jin Length 431; DЕ 0 cells

i.

Sampath

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Cohen CM

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RESULT 135
AAW86382
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A method has been developed for potentiating morphogen activity. The method comprising administering to a mammal a composition comprising a molecule capable of releasing morphogen inhibition. The method is usef for promoting neuronal cell growth by potentiating growth promoting effects of endogenous morphogens and is therefore useful for treating disorders characterized by neuronal cell loss, including Alzheimer's disease, Parkinson's disease, Huntington's disease, senile dementia, alcohol-induced dementia and stroke. The present sequence represents human osteogenic protein OP-1 which can be used as a morphogen in the method of the invention
                                                                               30-MAY-1997;
30-MAY-1997;
30-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                 Osteogenic protein; OP-1; tissue morphogenesis; morphogenic protein; bone fracture; osteochondrial defect; myocardium; infarction; axonal nerve regeneration; liver cirrhosis; ulcerative bowel disease emphysema; inflammatory disease; lung.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 16; Page 58-59; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human osteogenic protein 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Potentiating morphogen activity useful for treating Parkinson's disease and Huntington's disease.
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                                                                                                                                                                                                                                                                                                         WO9854572-A1
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DB; AAX56414.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                            97US-0048062P.
97US-0048063P.
97US-00866827.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Higgins D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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useful
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RESULT 136
AAY28656
ID AAY2865
AC AAY286
AC AAY286
AC AAY286
XX 19-OCT
XX 19-OCT
XX WHUMAN
COGNIL
KW COGNIL
KW Preux
KW MEMORY
KW OXYGEN
KW NEUXO
KW Alzhei
XX HOMO &

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CC candidate morphogenic protein (MP) or its analogues. The method comprises: (1) creating a local permissive defect site in a mammal; (2) cc administering a candidate MP systemically to the mammal; and (3) cc administering a candidate MP systemically to the mammal; and (3) cc administering a candidate MP systemically to the mammal; and (3) cc measuring the ability of the candidate protein to induce new tissue formation at the defect site. The test method is used to assess efficacy and pharmacokinetic properties of the MP, e.g. to evaluate dosage, to condition to the condition of the condition 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Evaluating systemic activity of morphogenic proteins at localised defect sites - useful for determining pharmacokinetics and efficacy of morphogenic and osteogenic proteins for systemic treatment of tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A method
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   English
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Sequence 431 ΑA;

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Matches
                           Query Match
Best Local (
1 INPETVPKPCCAPTQLNAIS
                  20;
                            Similarity
                  Conservative
                           100.0%;
                0;
                  Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
20
                                    Length 431;
                   Indels
                   <u>,</u>
                  Gaps
                    0
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AAY28656 standard; protein; 431
AAY28656;
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386 INPETVPKPCCAPTOLNAIS

405

Human osteogenic protein 1.

19-OCT-1999

(first entry)

Human osteogenic protein 1; hOP 1; morphogenic protein; TGF-Beta; cognitive function; progenitor cell; functional replacement tissue; precursor; cysteine conserved pattern; carboxy terminal active domain; memory dysfunction; neuroprotective effect; brain tissue damage; trauma; oxygen deprivation; glucose deprivation; neurotoxin; dementia; senility; neurodegenerative disorder; cardiac arrest; glucose metabolism disorder; Alzheimer's disease; pro-domain; anorexia; Parkinson's disease.

(CREA-) CREATIVE

BIOMOLECULES

Homo sapiens.

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WO9937320-A1
                                                                                          Domain
                                           /label= Carboxy_terminal_active_domain
/note= "Conserved pattern of cysteine residues"
                                                                                                             Location/Qualifiers
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RRESULT 137
AAW896
ID 9AW896
XX AAW896
XX AAW896
XX 20-MAR
DT 20-MAR
DT 24-MAR
XX Human
XX Human;
XW cartil
XW cartil
XW cortil
XW bone m
XX Homo s
XX Homo 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC The present sequence is the human osteogenic protein 1 (hOP 1) which is a corphogenic protein and is a representative of the TGF-Beta subclass of the true tissue morphogens. The morphogenic proteins are capable of inducing the proliferation and differentiation of progenitor cells into functional replacement tissue and can be used for restoring, improving and correcting cognitive function in mammals. The protein is processed from a CC precursor having an N-terminal signal peptide followed by a pro-domain. The pro-domain is cleaved to yield the mature C-terminal active domain. CC which includes a conserved pattern of cysteines. The protein can be used to reduce memory dysfunction and provides a neuro-protective effect in mammals with brain tissue damage resulting from mechanical or chemical trauma, oxygen or glucose deprivation, neuro-toxin, a neurodegenerative cff disorder or dementia. The subject may be afflicted with cardiac arrest, Alzheimer's disease, senility, glucose metabolism disorder, anorexia and covered to the contractive of the contractive disorder or dementia. The subject may be afflicted with cardiac arrest.
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Best Local :
08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                          Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation; bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 15a;
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N-PSDB; AAX80559.
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                                                                                                                                                                              23-MAY-1995;
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                                                                                                                                                                                                                                                                                              US5863758-A
                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic
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24-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW89679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CREA-) CREATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386
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20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
89US-00422699.
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Pred. No. 1.8e-06;
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RESULT 138
AAW95448
ID AAW954
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                                                                                                                                                                                                                                                                                                                                                                                            CC The present invention describes isolated DNA (I) encoding at least one costeogenically active region of human osteogenic protein-1 in prepro form (OP1-PP), murine OP1-PP, murine OP2-PP or human OP2-PP. Also described CC are: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal CC when implanted in a matrix; (B) vectors containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a correspondence of protein (II) produced by expression of transformed mammalian (EB) CC esteogenic protein (II) produced by expression of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OP1 corrected from mammalian cells following expression of the sequence that CC encodes hOP1-PP; and (G) production of an active osteogenic composition CC by truncating mature OP1 protein. Host cells of (C) are used to produce by truncating mature OP1 protein. Host cells of (C) are used to produce correction of acquired or congenital cranicfacial defects or other skeletal or constears to heal non-union fractures; to repair cartilage, e.g. in osteoarthritis, or generally wherever bone formation is required. The correction induce complete development of endochondral bone, including consent sequence represents human OP1. (Updated on 20-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
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21-NOV-1990;
04-DEC-1990;
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20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid encoding mammalian osteogenic proteins in prepro form to induce cartilage and bone formation when implanted in matrix, uses for repairing bone defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pang
Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease;
                                                                                                      26-MAR-1999
                                                                                                                                      AAW95448;
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 431 AA;
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22-FEB-1991
                                                                  Human osteogenic
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                                                                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                                                                                                1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                        100.0%;
(larity 100.0%;
Conservative (
                                                                                                      (first entry)
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91US-00810560.
92US-00827052.
92US-00841646.
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90US-00569920.
90US-00579865.
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90US-00621988.
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90US-00616374
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                                                                  protein 1 (OP1).
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Pred. No. 1.8e-06;
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WO9850061-A1 Homo sapiens uraemic medullary cystic disease; human; OP1

Section (). Laborate

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ARESULT 139
AAV240
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AAV240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
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                                                                                                                                                                                       Mouse; type 10 collage promoter; AP1 sequence A; osteogenic Op-1; morphogen; bone morphogenic protesin; BMP; soft tissue apoptosis; morphogen-activated regulatory pathway; tumour; cellular immune rejection; viral disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 431
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                                                                                                                                                                                                                                                                                                                                                    Human osteogenic
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                                                                WO9931136-A2
                                                                                                                             Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Harris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0045909P
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                                                                                                                                                                                                                                                                                                                                                    protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 2;
100.0%; Pred. No. 1.8e-06;
... Mismatches 0;
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                                                                                                                                                                                                                                                                                   protein;
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24-JUN-1999

14-MAR-1998;

98US-0078027P 99WO-US005533.

12-MAR-1999;

23-SEP-1999

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RESULT 140
AAY42797
ID AAY4277
XX AAY427
XX OAY427
XX OSteog
KW Oiffer
KW Diurip
KW plurip
KW plurip
KW plurip
KW adipog
XX Homo s
XX Ho
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                    Key
Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A method has been developed for maintaining or restoring tissue-
appropriate phenotype by expression of a phenotype-specific protein or by
inhibiting an intracellular pathway that induces expression of a gene
that is an inhibitor of normal phenotype. The method is for restoring
cellular phenotype in a cell effected by disease, damage or age. The
method comprises activating an intracellular pathway that induces
expression of a phenotype specific gene. Another method is also described
for restoring cellular phenotype in a cell effected by disease, damage or
age, comprising inhibiting an intracellular pathway that induces
expression of a gene (especially TGF-beta) that is an inhibitor of normal
phenotype. The methods can be used to treat soft tissue disorders by
pathway e.g. in tumours, cellular immune rejection and viral diseases.
The present sequence is used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                   Osteogenic protein; OP-1; bone morphogenetic protein 7; BMP-7; differentiation; proliferation; morphogenesis; morphogen; dimer; heterodimer; homodimer; cysteine; mesenchymal cell; stem cell; pluripotent; multipotent; progenitor; modulation; bone; osteogenesis; adipogenesis; tissue; repair; regeneration; maintenance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-DEC-1997;
01-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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98US-0110498P
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                                                                                                                                                                                                                                                                    Location/Qualifiers 330. .431
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100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                           "Active seven-cysteine C-terminal domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oeda E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kawabata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 431;
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RESULT 141
AAY431A
AXX AAY431
AXX AAY431
AX Chondx
KW Cell d
KW Ce
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC This sequence represents human osteogenic protein OP-1 (also known as CC bone morphogenetic protein-7 or BMP-7). OP-1 is a member of the morphogen CC family of proteins which is a subgroup of the TGP-beta superfamily of CC growth factors. Morphogens are known to induce the proliferation and CC differentiation of progenitor cells in numerous soft and hard tissues, CC endochondral bone morphogenesis. The mature morphogen protein results CC endochondral bone morphogenesis. The mature morphogen protein results CC contains a C-terminal domain which is responsible for morphogenetic CC activity. This C-terminal domain contains a pattern of 7 cysteine CC morphogen may be a homodimer comprising two submits from the same CC morphogen may be a homodimer comprising two submits from the same CC morphogen family member, or it may be a heterodimer of two differentiation CC comprises a lipid and a morphogen, where the morphogen consists of two CC proteins having 60 and 70% homology, respectively, to the C-terminal, CC seven-cysteine domain of human OP-1. The composition may be used for CC modulating cell differentiation, where the cells to be treated are cselected from multipotent messenchymal cells, pluripotent stem cells, cand progenitor cells. The composition may also be used to produce progenitor cells, where undifferentiated cells are closed to differentiated progenitor cells, adipocytes and osteoprogenitor cells. The composition facilitates the control of cells to promote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                             Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage formation; allogenic implant; xenogenic implant; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 431 AA;
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                                                                                                                                                                                                     US5958441-A.
                                                                                                                                                                                                                                                                 Homo sapiens
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   08-APR-1988;
                                                                   24-MAY-1995;
                                                                                                                                                                                                                                                                                                                             osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human osteogenic protein 1 sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-DEC-1999 (first entry)
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                                                                                                                                      28-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repair, regeneration and maintenance of tissue
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20; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 405
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   88US-00179406
                                                                   95US-00449699
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Pred. No. 1.8e-06;
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RESULT 142
AAW86339
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Implant for mammals permitting the influx, proliferation and differentiation of migratory progenitor cells, useful for inducing endochondral bone formation in mammals.
                                                                              Human; osteogenic protein; OP-1; osteogenesis; morphogen; bone repair; cartilage; OPX; calcium phosphate matrix; metal implant; cosmetic surgery.
                                                                                                                               Human osteogenic protein OP-1
                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Col 61-64; 127pp; English.
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           19-NOV-1998
                                 WO9851354-A2.
                                                          Homo sapiens
                                                                                                                                                          15-MAR-1999
                                                                                                                                                                                 AAW86339;
                                                                                                                                                                                                        AAW86339 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                          formation in mammals
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20; Conser
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                                                                                                                                                                                                                                                                                                                                                                    431 AA;
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                                                                                                                                                                                                                                                                                                                 100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                        (first entry)
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90US-00621988.
91US-00660162.
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89US-00315342.
89US-00422613.
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92US-00827052.
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                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                     Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                            Length 431;
                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oppermann H;
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15-MAY-1998;

98WO-US009951

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Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP-1; human; vector; morphogen expression; vascular disease; restenosis; vascular smooth muscle cell; proliferation inhibitor; atherosclerosis; vascular proliferative disease; angioplasty; therapy; collagen; extracellular matrix protein.
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14-MAR-1998;
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                                                                                       Nakaoka T, Miyazono
                                                                                                                                                                                                           04-DEC-1997;
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98US-00039107
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100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
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                                                                                       Sampath KT
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WPI; 1999-358109/30 N-PSDB; AAX79684.

A biologically active TGF-beta family member fusion protein competent refold, comprising a C-terminal linked TGF-beta family protein.

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WPI; 2000-303743/26. N-PSDB; AAA09390.

Oppermann H,

Tai M,

Mccartney J;

(STYC) STRYKER CORP

07-OCT-1998; 16-AUG-1999;

98US-0103418P 99US-00375333

07-OCT-1999;

99WO-US023372

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                                                                                                                                                                                          This sequence represents the human OP-1 protein. The invention relates to CC a vector for the expression of a morphogen in a mammalian cell. The CC vector comprises DNA encoding a morphogen comprising an amino acid comprises DNA encoding a morphogen comprising an amino acid comprises including the conserved seven cysteine domain of OP-1. Vascular disease are characterized by an excessive build-up of vascular smooth comprising the conserved seven cysteine domain of OP-1. Vascular composition comprising the morphogen are used to inhibit proliferation of smooth comprising the morphogen are used to inhibit proliferation of smooth comprising the morphogen are used to inhibit proliferation of smooth composition composition composition composition that in the integrity of vascular tissue, protect composition, maintain the normal balance of type I and III collagen in smooth muscle from cytotoxicity, reduce inflammation of vascular collagen in composition continuously tissue, treat a vascular proliferative disease, especially atherosclerosis or restenosis and to inhibit restenosis after angioplasty. All these treatments operate to preserve the cell phenotype by inhibiting an increase in extracellular matrix proteins, such as collagen, or by maintaining the normal balance of extracellular matrix collagen.
                                               Query Match
Best Local S
Matches 20
                                                                                                                                                   Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 39-41; 41pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vectors expressing morphogens and related compositions
                                                  l Similarity
20; Conserv
                                                    Conservative
                                                                       100.0%;
                                                    0; Mismatches
                                                  Score 111; DB 2;
Pred. No. 1.8e-06;
): Mismatches 0;
                                                                                                    Length 431;
                                                       Indels
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ARESULT 144
AAY925
XX AAY925
XX AAY925
XX 10-AUU
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XX 60-A;
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on protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           subdomain; BMP; TGF-beta family; protein refolding;
osteopathic; antibacterial; cytostatic.
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/product= "OP-1"
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RESULT 145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            useful for the construction of BMP mutants. Novel proteins comprise biologically active TGP-beta family member fusion proteins comprise: refold under suitable refolding conditions. The fusion proteins comprise: (1) a TGP-beta family protein C-terminal seven cysteine domain comprise: (1) a TGP-beta family protein C-terminal seven cysteine domain. Comprising finger 1, finger 2 and heel subdomains; and (2) a heterologous leader sequence domain operatively linked to the C-terminal domain. CC Truncations, heterodimers and mutants of these fusion proteins and methods of purifying the heterodimers are also claimed. The TGP-beta family proteins can be used to induce the full cascade of morphogenic events which culminate in skeletal tissue formation, including cartilage and endochronal bone formation. They are useful in the binding of fibrin can differentiation of fibroblasts, differentiation into chondroblasts, CC cartilage formation, vascular invasion, bone formation, remodeling, and properties such as solubility and stability, improved biological cartilities including altered receptor binding and improved targeting
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Best Local
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             morphogenesis in e.g. tissue and connective the finger 2 domain.
                              Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of
                                                                                                                                                                                                             07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-SEP-2000
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                                                                                                      WPI; 2000-303787/26
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                                                                                                                                                                                                                                                                  07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                          Synthetic
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l Similarity 100.0%;
20; Conservative 0
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                                                                                                                                        Tai M,
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99US-00374958.
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Pred. No. 1.8e-06;
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The invention relates to mutant TGF-beta (transforming growth factor-
CC beta) superfamily members. These mutants comprise one or more amino acid
CC substitutions in the base region of the finger 2 subdomain, and a C-
CC terminal residue selected from Arg, 11e, Leu, Ser and Ala. In the finger
CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an
CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g.,
CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-
CC beta superfamily proteins regulate developmental processes and include
CC proteins such as the osteogenic proteins (OPs), bone morphogenetic
CC proteins such are the finger 2 subdomain mutants of human osteogenic protein
CC (OP-1) (ABB09576-B09615). Mutant TGF-beta superfamily mutants encompassed by the
CC invention are the finger 2 subdomain mutants of human osteogenic protein
CC dental tissue, connective tissue, brain, liver and nerve tissue. The
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC cligament, tendon, muscle, fibrocartilage, joint capsule and
CC damaged mammalian tissue and to prevent or substantially inhibit
CC immune/infiammatory response-mediated tissue damage and scar tissue
CC superfies in a pH range of 6-9, increased solubility in aqueous solution
CC and improved stability and/or activity. Sequence ABB09547-B09548 and
CC ABB09576-B09615 represent mutant proteins have improved in vitro refolding
CC protein-1 (Op-1). Note: The present sequence is not shown in the
CC superfication, but is derived from the wild-type human OP-1 sequence
Sequence 431 AA;
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                                                on page 138-139
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Query Match Best Local Matches 386 1 INPETVPKPCCAPTQLNAIS 20 l Similarity 20; Conser Conservative 100.0%; 0; Score 111; DB 3; Pred. No. 1.8e-06; Mismatches Length 431; Indels 0,

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Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary.
                                                                                                                                                                                                                                     Human morphogenic protein OP-1, SEQ ID NO:39.
                                                                                                                                                                                                                                                                                                            AAB09518 standard; protein; 431 AA
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                                                                                                                                                                                                                                                             (first entry
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07-OCT-1998; 16-AUG-1999;

98US-0103418P. 99US-00374958. 99WO-US023371

(STYC) STRYKER CORP

WO200020607-A2

13-APR-2000

Oppermann H,

Tai 3

Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

162pp; English.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain mutants of the finger and include contains (apps), growth/differentiation factors (GDFs), bone morphogenetic proteins (BMPs), growth/differentiation factors (GDFs) and inhibins.

CC specific examples of TGF-beta superfamily mutants encompassed by the invention are the finger 2 subdomain mutants of human osteogenic protein-1 (OP-1) (AAB09576-B09615). Mutant TGF-beta proteins are used for conduction tissue morphogenesis in bone, non-mineralised skeletal tissue, collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagent, tendon, muscle, fibrocartilage, joint capsule and collamnalian tissue and to prevent or substantially inhibit community inflammacroyr response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta collagency beta for a pH range of 6-9, increased solubility in aqueous solution canding the first and for activity. The present sequence represents
Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                      Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                            AAB09596 standard; protein; 431 AA
                                                                                               Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                  Human OP-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 431 AA;
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                                                                                                                                                                                                                                                                                  mutant protein R421D.
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Pred. No. 1,8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 431;
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KW fin

11-SEP-2000

Human OP-1 mutant protein R421S

Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability;

RESULT 148

0

AAB09607 standard; protein; 431

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cc beta) superfamily members. These mutants comprise one or more amino acid cc substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lyg), or residues containing an cc amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CG Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGP-CC beta superfamily proteins (e.g., Arg, Lyg), or residues (e.g., CG Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGP-CC beta superfamily proteins (OPs), bone morphogenetic proteins superfamily proteins factors (GDFs) and inhibins. CG proteins (BMPs), growth/differentiation factors (GDFs) and inhibins. CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, connective tissue, brain, liver and nerve tissue. The CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue. The CC groteins can be used for conjunction with a biocompatible matrix e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, CC cartilage and/or other mineralised skeletal or connective tissue. The CC induced mammalian tissue and to prevent or substantially inhibit commune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TCF-beta guperfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences AAB09547-B09548 and CC AAB09576-B09615 represent mutant or chimeric forms of human osteogenic conspectived from the wild-type human OP-1 sequence cc given on page 138-139
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                                                                                  Query Match
Best Local S
Matches: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, mon-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                     Sequence 431
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16-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention relates to mutant TGF-beta (transforming growth a) superfamily members. These mutants comprise one or more
  386
                                         1 INPETVPKPCCAPTQLNAIS 20
                                                                                                         Similarity
  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page; 162pp; English
                                                                                     Conservative
                                                                                                                                                                        AA;
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                                                                                  100.0%; Score 111; DB 3;
100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
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The invention relates to mutant TGF-beta (transforming growth factorCC beta) superfamily members. These mutants comprise one or more amino acid
CC substitutions in the base region of the finger 2 subdomain, and a CCC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger
CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g.,
CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGFCC beta superfamily proteins regulate developmental processes and include
CC proteins (BMPs), growth/differentiation factors (GDFs) and inhibins.
CC Specific examples of TGF-beta superfamily mutants encompassed by the
CC invention are the finger 2 subdomain mutants of human osteogenic protein
CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
CC inducing tissue, connective tissue, brain, liver and nerve tissue. The
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC intervertebral discs. The OP-1 mutants can be used to repair diseased or
CC immune/inflammatory response-mediated tissue damage and scar tissue
CC superfamily members, the mutant proteins have improved in vitto refolding
CC superfamily members, the mutant proteins have improved in vitto refolding
CC and improved stability and/or activity. Sequences AAB09547-B09548 and
CC specification, but is derived from the wild-type human OP-1 sequence Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain. 07-OCT-1998; 16-AUG-1999; WO200020607-A2 Synthetic. Homo sapiens solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein. WPI; 2000-303787/26 Oppermann H, 13-APR-2000 Claim 23; Page; 162pp; English 07-OCT-1999; (STYC +) STRYKER CORP Tai M, 98US-0103418P. 99US-00374958. 99WO-US023371 Mccartney

밁 Matches Query Match Best Local Sequence 431 AA; 386 20; 1 INPETVPKPCCAPTQLNAIS 20 Similarity INPETVPKPCCAPTQLNAIS 405 Conservative 100.0%; Score 111; DB 3; 100.0%; Pred. No. 1.8e-06; 0; Mismatches Length 431; 0 0

RESULT 149 AAB09615 ID AAB096 AAB09615 standard; protein; 431

> Homo sapiens. Synthetic. Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein. 07-OCT-1998; 16-AUG-1999; 07-OCT-1999; Oppermann H, 13-APR-2000 Human OP-1 mutant protein R426T. AAB09615; (STYC) STRYKER CORP (first entry) Tai M, 98US-0103418P. 99US-00374958. 99WO-US023371 Mccartney J;

Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

Claim 23; Page; 162pp; English

ce the invention relates to mutant '164-beta' (transforming growth factorce beta) superfamily members. These mutants comprise one or more amino acid
ce substitutions in the base region of the finger 2 subdomain, and a Cce terminal residue selected from Arg, ILe, Leu, Ser and Ala. In the finger
2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an
ce amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g.,
Ce Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGFce beta superfamily proteins regulate developmental processes and include
ce proteins (BMPs), growth/differentiation factors (GDFs) and inhibins.
ce specific examples of TGF-beta superfamily mutants encompassed by the
ce invention are the finger 2 subdomain mutants of human osteogenic proteince inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
central tissue, connective tissue, brain, liver and nerve tissue. The
ce proteins can be used in conjunction with a biocompatible matrix e.g.,
ce collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
ce cartilage and/or other mineralised skeletal or connective tissue. The
ce cartilage and/or other mineralised skeletal or connective tissue e.g.,
ce cartilage and/or other mineralised skeletal or connective tissues or
ce intervertebral discs. The OP-1 mutants can be used to repair diseased or
ce inmune/inflammatory response-mediated tissue damage and scar tissue
formation following an injury. Compared to the wild-type TGF-beta
ce formation following an injury. Compared to the wild-type TGF-beta
ce formation members, the mutant proteins have improved in vitro refolding
ce properties in a pH range of 6-9, increased solubility in aqueous solution
and improved stability and/or activity. Sequences AhB09547-B09548 and
ce intervention following an injury compared in the wild-type human OP-1 sequence
contains the sequence is not shown in the
contains the contains the derived from the wild-type human OP-1 sequence The invention relates to mutant TGF-beta (transforming growth factor-

Sequence 431 ΑA;

Query Match Best Local Similarity 100.0%; 111; No. 1 DB 3; Length 431;

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The invention relates to mutant TGF-beta (transforming growth factorbeta) superfamily membors. These mutants comprise one or more amino acid cubstitutions in the base region of the finger 2 subdomain, and a C-terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger C subdomain, basic residues (e.g., Arg, Lys), or residues containing an amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CG Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-beta superfamily proteins regulate developmental processes and include proteins (Mys), growth/ddifferentiation factors (GPS) and inhibits. Gerians (Mys), growth/daifferentiation following an injury. Compared to the wild-type TGF-beta contains can be used for intervertebral discs. The OP-1 mutants can be used to repair diseased or damaged mammatory response-mediated tissue damage and scar tissue formune/inflammatory response-mediated tissue damage and scar tissue formune/inflammatory response-mediated tissue damage and scar tissue consporties in a pH range of 6-9, increased solubility in aqueous solution.
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page; 162pp; English
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16-AUG-1999;
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                                                                                                                                               and improved stability and/or activity. Sequences AAB09547-B09548 AAB09576-B09615 represent mutant or chimeric forms of human osteog protein-1 (OP-1). Note: The present sequence is not shown in the specification, but is derived from the wild-type human OP-1 sequence.
                                                                  Similarity
                                                                                                                                   ation, but is derived
page 138-139
INPETVPKPCCAPTQLNAIS
                          INPETVPKPCCAPTQLNAIS
                                                       Conservative
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s 0;
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standard; protein; 431
mutant
                      (first
protein N422D
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Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein

99WO-US023371.

99US-00374958 98US-0103418P

STRYKER CORP

Tai M. Mccartney

2000-303787/26

Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

Claim 22; Page; 162pp; English.

The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn). The finger 2 subdomain basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Ser, Thr). TGF-CC cll, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic croteins (BMPs), growth/differentiation factors (GDFs) and inhibins. CC proteins (BMPs), growth/differentiation factors (GDFs) and inhibins. CC invention are the finger 2 subdomain mutants of human osteogenic protein-coll (OPs) (Abagos76-B0515). Mutant TGF-beta proteins are used for inducing tissue morphogenesis in bone, non-mineralised skeletal tissue. The

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RESULT 152
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
The invention relates to mutant TGF-beta (transforming growth factorbeta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a Cterminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an
                                                                                                                                             Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                          Claim 23; Page; 162pp; English.
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16-AUG-1999;
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Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental
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OP-1

mutant

protein R421T.

11-SEP-2000

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AAB09613;

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Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmented regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental ti connective tissue; cartilage; vulnerary; mutant; mutein.

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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid consistiutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, 11e, 1eu, Ser and Ala. In the finger C2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., Gln, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic composition are the finger 2 subdomain mutants encompassed by the city of the finger 2 subdomain mutants of human osteogenic protein (Pp.) (ALBOS76-B90615). Mutant TGF-beta proteins are used for collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or commective tissue e.g., collagent, transcale, fibrocartilage, joint capsule and contended tissue for mutants can be used to repair diseased or intervertebral discs. The OP-1 mutants can be used to repair diseased or intervertebral discs. The OP-1 mutants can be used to repair diseased or intervertebral discs. The OP-1 mutants can be used to repair diseased or intervertebral discs. The OP-1 mutants can be used to repair diseased or intervertebral discs. The OP-1 mutants can be used to repair diseased or intervertebral discs. The OP-1 mutants and intervertially inhibit composition of a pit range of 6-9, increased solubility in aqueous solution capsular diseased or cartilage and scar tissue for many discounts. The open discounts have improved in vitro refolding properties in a pit range of 6-9, increased solubility in aqueous solution of the minum of teopen and cartilage and cartilage and cartilage and cartilage and c
Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
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The invention relates to mutant TGF-beta (transforming growth factor-cc beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-c terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an cc amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CG llu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic proteins (BMPs), growth/differentiation factors (GDFs) and inhibins. CG Specific examples of TGF-beta superfamily mutants encompassed by the invention are the finger 2 subdomain mutants of human osteogenic protein-cCC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue. The proteins can be used in conjunction with a bicocompatible matrix e.g., collagen, hydroxyapatite or carboxymethylcollulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., colliagent, tendon. muscle. fibrocartilage. Tonit cansail a and
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Best Local
                                                                                                                                         ingament, tendon, muscle, fibrocartilage, joint capsule and intervertebral discs. The OP-1 mutants can be used to repair diseased or damaged mammalian tissue and to prevent or substantially inhibit immune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta superfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences AAB09547-B09548 and AAB09576-B09615 represent mutant or chimeric forms of human osteogenic protein-1 (OP-1). Note: The present sequence is not shown in the specification, but is derived from the wild-type human OP-1 sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
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16-AUG-1999;
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1 Similarity
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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid C substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, 11e, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CGlu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include proteins (super), growth/differentiation factors (GDFs) and inhibins.

CC groteins (BMPs), growth/differentiation factors (GDFs) and inhibins.

CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, finducing tissue morphogenesis in bone, non-mineralised skeletal tissue, collagen, hydroxyapatite or carboymethylcellulose for regenerating bone, cartiage and/or other mineralised skeletal or connective tissue, brain, liver and nerve tissues. The CC ligament, tendon, muscle, fibrocartilage, joint capsule and cartial discs. The OP-1 mutants can be used to repair diseased or damaged mammalian tissue and to prevent or substantially inhibit compartion following an injury. Compared to the wild-type TGF-beta conditions and the proteins have improved in vitro refolding conditions. The mutant proteins have improved in vitro refolding proteins—1 (OP-1). Note: The present sequences AAB09547-B09548 and CC properties in a pH range of 6-9, increased solubility in aqueous solution can be used to condition the condition of the protein of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        morphogenesis in e.g. bone, I tissue and connective tissue the finger 2 domain.
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16-AUG-1999;
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Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

WPI; 2000-303787/26.

Disclosure; Page; 162pp; English.

The invention relates to mutant TGF-beta (transforming growth factorCC beta) superfamily members. These mutants comprise one or more amino acid
consultations in the base region of the finger 2 subdomain, and a Ccc terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger
cc subdomain, basic residues (e.g., Arg, Lys), or residues containing an
cc amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g.,
cc Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGFcc beta superfamily proteins regulate developmental processes and include
cproteins such as the osteogenic proteins (OPs), bone morphogenetic
cc proteins (BWPs), growth/differentiation factors (GDFs) and inhibins.
cc Specific examples of TGF-beta superfamily mutants encompassed by the
invention are the finger 2 subdomain mutants of human osteogenic proteincc inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
consective tissue, brain, liver and nerve tissue. The
corrections can be used in conjunction with a biocompatible matrix e.g.,
cc cartilage and/or other mineralised skeletal or connective tissues e.g.,

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RESULT 159
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The invention relates to mutant TGF-beta (transforming growth factorbeta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., Gln, Asp) or residues developmental processes and include beta superfamily proteins regulate developmental processes and include
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                                                                                                                                                                     Claim 22; Page; 162pp; English.
                                                                                                                                                                                                      Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
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            tissue and connective tissue the finger 2 domain.
                                             Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 431 AA;
                                                                                                 WPI; 2000-303787/26.
                                                                                                                                  Oppermann H,
                                                                                                                                                                                                                                                                                        13-APR-2000
                                                                                                                                                                                                                                                                                                                        WO200020607-A2
                                                                                                                                                                    (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l Similarity
20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry
                                                                                                                                Tai M,
                                                                                                                                                                                                    98US-0103418P
99US-00374958
                                                                                                                                                                                                                                                       99WO-US023371.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 3; 100.0%; Pred. No. 1.8e-06; tive 0; Mismatches 0;
                                                                                                                                  Mccartney J;
                              and comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGF-beta superfamily;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                  dental
1 a regi
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Claim 23; Page; 162pp; English

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AAB09604
                                                                                                                                                                                                                                                                                                              RESULT 161
                                                                                                                                                                Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue;
                    07-OCT-1998;
16-AUG-1999;
                                                                                                                                                     connective tissue; cartilage; vulnerary; mutant; mutein.
                                                                                                                                                                                                                      Human OP-1
                                                                                                                                                                                                                                             11-SEP-2000
                                                                                                                                                                                                                                                                                        AAB09604 standard; protein; 431
                                                     07-OCT-1999;
                                                                          13-APR-2000.
                                                                                                WO200020607-A2
                                                                                                                     Synthetic
                                                                                                                                 Homo sapiens
(STYC ) STRYKER CORF
                                                                                                                                                                                                                                                                                                                                               386
                                                                                                                                                                                                                                                                                                                                               INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                      mutant protein R426E.
                                                                                                                                                                                                                                             (first entry)
                    98US-0103418P
99US-00374958
                                                     99WO-US023371.
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cc beta) superfamily members. These mutants comprise one or more amino acid consubstitutions in the base region of the finger 2 subdomain, and a C-cc terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys) or residues containing an amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CG Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-cc beta superfamily proteins regulate developmental processes and include groteins such as the osteogenic proteins (OPS), bone morphogenetic proteins superfamily mutants encompassed by the cc invention are the finger 2 subdomain mutants of human osteogenic protein (OP-1) (AAB09576-B09615). Mutant TGF-beta proteins are used for inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, dental tissue, connective tissue, brain, liver and nerve tissue. The cc proteins can be used in conjunction with a biocompatible matrix e.g., cc collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissue e.g., ligament, tendon, muscle, fibrocartilage, joint capsule and cc intervertebral discs. The OP-1 mutants can be used to repair diseased or immune/inflammatrory response-mediated tissue damage and scar tissue confluence in mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution consumptive tissue solution and improved stability and/or activity. Sequences AAB09547-B99548 and cc specification, but is derived from the wild-type human op-1 sequence conspecification, but is derived from the wild-type human op-1 sequence.
specification, but is
given on page 138-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention relates to mutant TGF-beta (transforming
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Best Loc Matches Sequence 431 Local Similarity 20; Conserv 100.0%; Score 111; DB 3; ilarity 100.0%; Pred. No. 1.8e-06; Conservative 0; Mismatches 0; ĀΑ; Length 431; 0,

us-10-619-910-11.oct24.rag

Oppermann H, Tai M, Mccartney

WPI; 2000-303787/26.

Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

Claim 22; Page; 162pp; English

The invention relates to mutant TGF-beta (transforming growth factor-cell beta) superfamily members. These mutants comprise one or more amino acid combeta) superfamily members. These mutants comprise one or more amino acid combeta superfamily members. These mutants comprise one or more amino acid combeta superfamily basic residues (e.g., Arg., Lys.), or residues containing an cell smide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., Camide group) (e.g., Ser, Thr.). TGF-cell superfamily proteins regulate developmental processes and include corotains such stehe osteogenia proteins (OPs.), bone morphogenetic corotains (BMPs.), growth/differentiation factors (GDPs.) and inhibins. Specific examples of TGF-beta superfamily mutants encompassed by the ciny for the finger 2 subdomain mutants of human osteogenic proteins (OP-1) (ABB09576-B99615). Mutant TGF-beta proteins are used for conducting tissue morphogenesis in bone, non-mineralised skeletal tissue, connective tissue, brain, liver and nerve tissue. The collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, collagen, hydroxyapatite or proteins are used to repair diseased or damaged mammalian tissue and to prevent or substantially inhibit commune/inflammatory response-mediated tissue damage and scar tissue for superfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences AB09547-B09548 and collabellity and/or activity. Sequences AB09547-B09548 and collabellity and/or activity. Sequences habon in the specification, but is derived from the wild-type human Op-1 sequence on page 138-139

Seguence 431 AA,

Matches Query Match 20; Similarity Conservative 100.0%; 0, Score 111; Pred. No. 1. DB 3; 1.8e-06; es 0; Length 431; 0 0

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AAY92442
ID AAY9
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AC AAY9
DT 10-1
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DE Huma
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Choi
KW Oste
KW choi
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OS Homa
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FT Dom.
FT Dom. 10-AUG-2000 AAY92442 AAY92442 standard; protein; 431 osteogenic protein 1 (OP-1). (first entry) A

Osteogenic protein; OPX; seven-cysteine domain; osteogenic; chondrogenic. osteopathic; implant; transplantation.

Homo sapiens

Domain Location/Qualifiers
330. .431
/label= C-terminal_7-cysteine_domain

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                                                                                                                                                                                                                                                                                                                                           RESULT 163
AAY82158
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The specification concerns a novel method for repairing a defect in a nor -articular cartilage tissue or a ligament of a mammal, which comprises providing an osteogenic protein in a biocompatible, bioresorbable carrier to the defect locus to induce the formation of functional replacement cartilage. The methods and implants, promote chondrogenesis and are useful for repairing or correcting a defect in a non-articular cartilage tissue or a ligament of a mammal, e.g. cleft larynx, oedema of the glottis, ulceration of the larynx caused by sphilis, tuberculosis or malignancy, defects resulting from mechanical trauma to the larynx or trachea (including tracheotomy and laryngotomy), laryngeal cancer, and defects of the ear, nose, ribs, invertebral discs, and interarticular
WPI; 2000-222942/19
                         Sampath KT,
                                                                            03-JUN-1994;
                                                                                                     02-JUN-1995;
                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                         Human; osteogenic protein; OP1; OPX; matrix;
articular cartilage; replacement body part.
                                                                                                                                                                                                                                                Human osteogenic
                                                                                                                                                                                                                                                                           07-JUN-2000
                                                                                                                                                                                                                                                                                                                             AAY82158 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 55-56; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel methods for repairing a defect in mammalian nonarticular cartilage tissue or ligaments using an osteogenic protein in a biocompatible, bioresorbable carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAA09361.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-1998;
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                                                                                                                               22-FEB-2000
                                                                                                                                                        US6027743-A.
                                                                                                                                                                                                                                                                                                    AAY82158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vukicevic S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200020021-A1
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                                                  (STYC ) STRYKER CORP
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                                                                                                                                                                                                                                                                                                                                                                                              386 INPETVEKECCAPTOLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                       щ
                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                         Rueger DC,
                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Katic V,
                                                                           94US-00253398
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                                                                                                     95US-00458811
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                                                                                                                                                                                                                                               protein OP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
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                          Khouri RK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 3;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     즙
                                                                                                                                                                                                                       skeletal joint; bone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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RESULT 164
AAY57229
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes devices (I) and methods (II) for the manufacture in vivo of autogenous replacement body parts (especially conscients) comprising a number of distinct tissues. (I) and (II) care used for the manufacture in vivo of autogenous replacement body parts (especially skeletal joints) comprising a number of distinct tissues. The conservation of autogenous replacement body parts (especially skeletal joints) comprising a number of distinct tissues. The conservation of mechanically and functionally conservation of mechanically and functionally conservation of a functional body part. These tissues are of an appropriate size and have correct structural relationships to result in constitution of a functional body part. In particular, the multi-tissue conservation, becomes incorporated, institu at the site of intended use or remotely, becomes incorporated, integrating with adjacent tissues. Conservations of the conditions present at the recipient site. The devices are capable of being precisely contoured and shaped to exactly match any defect however complex the organ or organ shape it is used to replace. Conservation of the conditions present at the reasy to obtain. The devices have minimal donor site morbidity. The present sequence corrected to the present invention of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                          11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
20-JUL-1994;
26-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                       Morphogen; bone formation; modulation; endochondral; OP-1; OP-2; DPP; transforming growth factor; TGF-beta; osteogenic protein; BMP2; Vgr-1; GDF-1; 60A protein; screening assay; therapeutic; cell death.
                                                                                                                                                                                                                                                            30-NOV-1999
                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                           Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY57229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY57229 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         skeletal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAZ95567
                                                                                                                                                                                                                             15-AUG-1997;
                                                                                                                                                                                                                                                                                           US5994131-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Col 27-30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In vivo
                                                                            (CREA-) CREATIVE BIOMOLECULES INC
                           Ğ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \mapsto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       manufacture of autologous replacement body parts for replacing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       joints.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVEKECCAPTOLNAIS 20
                          Oppermann H,
Ozkaynak E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                          91US-00667274.
91US-00752764.
91US-00752861.
92US-0938021.
94US-00278729.
95US-00451953.
                                                                                                                                                                                                                             97US-00912088
                                                                                                                                                                                                                                                                                                                                                                                                                           protein (hOP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21pp; English
                                               Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 3;
Pred. No. 1.8e-06;
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                                               Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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                                               DC,
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                                             Pang RHL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
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WPI; 2000-038265/03

N-PSDB; AAZ39477

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PROXX 
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AAB02784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumour growth factor beta; TGF-beta; morphogenic protein; BMP; OP; bone morphogenic protein; osteogenic protein; mutant; modified; finger 2 sub-domain; finger 1 domain; heel domain; chimeric protein; osteogenic; proliferative; antiinflammatory; tissue morphogenesis; tissue repair; regeneration; proliferation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human morphogenic protein OP-1 protein SEQ ID NO:39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-AUG-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-APR-2000.
                                                                                                                                                                                                                                                                                                                                 (STYC ) STRYKER CORP
                                                                                                                                               2000-303776/26
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                                                                                                                                                                                                                                   Tai M,
                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0103418P.
99US-00374936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US023370.
                                                                                                                                                                                                                                             Mccartney
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The present sequence is the human osteogenic protein 1 (OP-1) (also known as BMP-7). OP-1 is a bone morphogen which induces cellular differentiation and thus prevents cell proliferation. Morphogens can also be used to treat cancer, as it has been shown that they can inhibit tumour cell proliferation as well. The types of cancer include adrenal, anus, bladder, bone, brain, breast, cervix, colon, corpus, endocrine,

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epithelial cells identified in an assay for bone formation. The method uses a protein that induces endochondral bone formation such as OP-1, a morphogenic protein which is a member of the transforming growth factor (TGF-beta) superfamily. Other morphogens useful in the invention are osteogenic proteins (OP-1, OP-2 and CBMP2) and related proteins such as DPP, Vgr-1, GDF-1 and the 60A protein. The method is used as a screening assay for identifying compounds which modulate the level of expression of a morphogen. The method allows the determination of substances useful in therapeutic treatments to modulate (stimulate or depress) morphogen expression and/or secretion in disease treatment. Compounds can be screened for their ability to modulate the effective systemic or local concentration of a morphogen. Compounds which can be screened include chemicals, biological response molecules such as lymphokines, cytokines, mediums conditioned by eukaryotic cells, body fluids or tissue extract. The assay has few steps and is easy to carry out producing results of the contract of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention provides a method for altering expression of a morphoge a mammalian cell with a compound that modulates morphogen expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Screening assay useful for identifying compounds which can act modulate expression of a morphogen in a mammalian cell.
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AAY973
AC AAC97
AC CACAA
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CC superfamily chimeric protein (I) derived from at least 2 different
CC members of the superfamily comprising a dimer with one monomer that
CC contains a finger 2 domain derived from a first family member and a
CC finger 1 domain and heel domain, both derived from a second family
CC member. The monomer futther comprises a conserved C-terminal cysteine
CC skeleton. (I) has osteogenic, proliferative and antiinflammatory
CC activities. The TGF-beta superfamily chimeric proteins (I) are useful for
C1 inducing tissue morphogenesis (i.e. molecules capable of tissue repair
CC and regeneration and/or inhibiting inflammation) in bone, non-mineralised
CC skeletal tissue, dental tissue, connective tissue, brain, liver and nerve
CC and for inducing the proliferation and differentiation of uncommitted
CC progenitor cells in a tissue-specific manner to support new tissue
CC formation. AAA29887 to AAA29897 and AAB02748 to AAB02824 represent
CC sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; osteogenic protein; OP-1; morphogen; cell differentiation; cell growth inhibition; BMP-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    monomer containing domains from two family members
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY97369;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY97369 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Page 125-126; 149pp; English
                                                                                                                                                                                                                                                                            Claim 1; Page 69-71; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sampath KT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-NOV-1999;
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                                                                                                                                                                                                                                                                                                                                                                opportunistic infection and
                                                                                                                                                                                                                                                                                                                                                                                                      Administration of a morphogen to treat and alleviate the symptoms cancer, such as abnormal cell morphology, abnormal enzyme levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000-387615/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA30332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CREATIVE BIOMOLECULES
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llarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cohen CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-00191239
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                                                                                                                                                                                                                                                                                                                                                                pain.
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Pred. No. 1.8e-06;
); Mismatches 0;
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RESULT 167
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Best Local .
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The present sequence represents a human osteogenic protein 1 (OP1). The protein is used in devices of the invention. The specification describes devices for repairing a skeletal joint defect in mammals. The device comprises exogenous osteogenic protein deposited on the surface of a biocompatible, biodegradable matrix. The matrix comprises distinct tissues derived from a proximal or distal hemi-joint. The device serves as a template to form an in vivo functional skeletal joint replacement which is long term mechanically and functionally viable. The exogenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       stomach cancers, teratocarcinoma, testicular, thyroid, ureteral, urinary, uterine and metastatic cancers, the latter of unknown origin. In addition, OP-1 may be used to alleviate the symptoms of cancer, which include abnormal bleeding, abnormal bodily function, abnormal teste cell morphology, abnormal enzyme levels, abnormal hormone levels, abnormal coll nonofoetal antigen levels, abnormal tissue growth, abnormal tissue mass, abnormal stumour-associated protein levels, altered neurologic function, fatigue, fever, lesions, malnutrition, metastasis, nausea, obstruction of a bodily passage, opportunistic infection, pain, poor Karnofsky performance status, presence of cell-surface, histological cancer, intracellular and molecular markers, tumour invasion, urinary frequency and weight loss.
                                                                                                                                                                                                  Device for repairing skeletal joint defect in mammals comprises exogenous osteogenic protein deposited on the surface of a matrix comprising plural distinct tissues derived from proximal or distal hemi-joint.
                                                                                                                                                                 Disclosure; Col 27-30; 21pp; English
                                                                                                                                                                                                                                                                               N-PSDB; AAA75039.
                                                                                                                                                                                                                                                                                                                                   Sampath KT,
                                                                                                                                                                                                                                                                                                                                                                                                         03-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US6110482-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; osteogenic protein 1; OP1; skeletal joint defect; tissue repair; articular cartilage defect.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amino acid sequence of a human osteogenic protein 1 (OP1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB08841 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oesophageal, Fallopian tube, fat cell, gallbladder and gastrointestinal tract cancers, germ cell tumours, kidney cancer, leukaemia, liver cance lymphoma, lung, muscle, nervous system, ocular tissue, oral, ovarian, pancreatic, prostate, rectal, skin, small intestine, soft tissue and
                                                                                                                                                                                                                                                                                                                                                                                                                                           02-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-AUG-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                weight loss
                                                                                                                                                                                                                                                                                               2000-571418/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                      STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                 Rueger DC,
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                                                                                                                                                                                                                                                                                                                                                                                                          94US-00253398
                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-00459129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein; 431
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                                                                                                                                                                                                                                                                                                                                   Khouri RK;
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                               describes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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RESULT 168
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PP 23-DEC
YX 23-DEC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-AUG-1992;
15-SEP-1992;
15-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       opl is deposited on the matrix surface to induce formation of new distinct tissues, and to permit regeneration of a functional skeletal joint replacement comprising distinct tissues. The devices are useful for inducing the formation of a functional skeletal joint replacement, and for repairing an articular cartilage defect occurring in a synovial cavity in a mammal. They are also useful for repair and regeneration of distinct tissues at a single defect side in a mammal and for the mammaleature, in vivo, of autogenous replacement body parts comprising
                        New compositions containing a morphogenically active fragment of OP-3, useful for inducing the formation of replacement tissue at a tissue lo in a mammal, especially useful for replacing diseased or damaged tissuin a mammal.
                                                                                                                                                        WPI; 2001-069971/08.
N-PSDB; AAC89688.
                                                                                                                                                                                                                                    Ozkaynak E,
Oppermann H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-1991;
30-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; tissue morphogenesis induction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human tissue morphogenesis protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAR-2001
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                                                                                                                                                                                                                                                                                                                (STYC ) STRYKER CORP
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97US-00901200
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92US-00971009
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92US-00938337
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92US-00938021.
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91US-00752857
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 esis induction; OP-3; cell different disease; blood disorder; transplant
                                                                                                                                                                                                                                                            'n
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                            Rueger DC,
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RESULT 169
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; OP-1; contraceptive; antiinfertility; gynaecological; morphogen; luteinisation inhibitor; osteogenic protein-1; menopause; progesterone synthesis; oestrogen synthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                               Use of morphogen, a luteinization inhibitor, for increasing fertility, alleviating symptoms of menopause, delaying onset of menopause and for contraception.
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27-APR-2000;
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DB; AAC83806.
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2000US-00561171.
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The present invention relates to a morphogen which is a luteinisation inhibitor. The morphogen comprises the C-terminal seven-cysteine skeleton of human osteogenic protein-1 (OP-1). The present sequence is the full-length OP-1 protein. The morphogen comprises amino acids 330-431 of the present sequence. The morphogen is useful for increasing fertility, alleviating symptoms of menopause, delaying onset of menopause, and attenuating progesterone synthesis and inducing or increasing oestrogen synthesis in atretic or healthy ovarian follicles of a subject. Compounds which interfere with the binding of the morphogen to its receptor are

431

contraception

Query Match Best Local Similarity

100.0%;

Score Pred.

111; DB 4; No. 1.8e-06;

Length 431

Sequence 431

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Claim 1; Page 62-64; 74pp; English.

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RESULT 170
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Best Local
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                                                      The invention relates to inducing angiogenesis in a mammal by administering a morphogenic protein, which is not bone morphogenic protein (BMP)-2 or GDP-5 improving the angiogenic inductive activity of the morphogenic protein in a mammal by co-administering a morphogenic protein stimulatory factor (MPSP). The method is useful for inducing angiogenesis in a mammal required in physiological processes and treating pathophysiologies such as reproduction, wound healing, organ transplantation, bone repair, ischaemic heart disease, ischaemic peripheral vascular disease, tumours, rhoumatoid arthritis, diabetic retinopathy, myocardial infarction, inflammatory diseases such as ulcers. The present sequence represents human osteogenic protein, CP-1 (also
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                                                                                                                                                                                                                                                      Claim 6; Page 77-77; 81pp; English.
                              known as bone morphogenic protein method of the invention
                                                                                                                                                                                                                                                                                   Inducing angiogenesis in a mammal required in physiological processes in treating pathophysiologies such as reproduction, wound healing, ischemic heart disease, by administering a morphogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                    (STYC)
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Pred. No. 1.8e-06;
                                             7), a
                                               morphogenic
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The present sequence is human osteogenic protein 1 (hOP-1) also referred CC as bone morphogenic protein 7 (BMP-7). The invention relates to a method CC for improving the tissue inductive capability of a morphogenic protein in CC anamamal by administering the morphogenic protein, a hormone, and a CC soluble receptor of the hormone, where the morphogenic protein's CC capability to induce tissue formation when accessible to the progenitor CC cell in the mammal, is enhanced by the hormone-receptor combination. The CC method is useful for improving the tissue inductive capability of a CC morphogenic protein at a target locus e.g. a jaw bone defect such as a CC fracture, a non-union fracture, a critical or non-critical size defect, CC an osteochondral defect, tissue (cartilage or soft tissue or neural CC tissue) degenerative condition, a fusion or a bony void, in a mammal. The CC degeneration and other tissue diseases, congenital diseases and CC developmental abnormalities of cartilage, bone and other tissues. CC osteogenic devices is useful in the treatment of osteoarthritis. The CC morphogenic device is useful in the treatment of osteoarthritis. The CC morphogenic device is useful in the treatment of osteoarthritis. The CC morphogenic device is useful in the treatment of osteoarthritis. The CC morphogenic devices are such as rheumatoid and psorilatic arthritis, constitis, ulcerative colitis, SLE-systemic lupus erythematosus, Whipple's
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                                                                                                                                                                                                                                                                                                                                                                                        Claim 30; Page 56-58; 63pp; English.
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                                               The present sequence is that of human osteogenic protein OP-1. The invention is based on the discovery that admixing osteogenic protein and a non-synthetic, non-polymeric matrix such as collagen or beta-tricalcium phosphate with a binding agent yields an improved osteogenic device with enhanced bone and carrilage repair capabilities. The osteogenic protein may be OP-1, OP-2, bone morphogenic protein (BMP)-2, BMP-46, BMP-5, BMP-6, BMP-10, BMP-11, BMP-12, BMP-15, BMP-16, DPP, Vg1, Vgr, 60A protein, GDP1, GDP3, GDP5, GDP6, GDP7, GDP3, GDP10, GDP11, or their variants, and is especially OP-1. The osteogenic devices promote accelerated formation of repair tissue with enhanced stability using less osteogenic protein than previous devices. Defects susceptible to repair include critical size defects, non-critical size defects, non-union fractures, fractures, osteochondral defects and subchondral defects (claimed), and defects resulting from degenerative diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Implant for inducing local bone or cartilage formation, comprising osteogenic proteins, non-synthetic polymeric matrixes and binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osteogenic protein; OP-1; osteochondral defect; sub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RUEG/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        osteochondritis desiccans; osteopathy; vulnerary; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-OCT-2001 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB82695 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CHAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RUEGER D C.
TUCKER M A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tucker MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 50-51;
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330. 431
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subchondral defect; degenerative disease;
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Pred. No. 1.8e-06;
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Best Local S
Matches 20
                        The invention relates to a method of treating amyotrophic lateral sclerosis, multiple sclerosis or a spinal cord injury, comprising administering a morphogen which stimulates production of an nerve cell administering a morphogen which stimulates production of an nerve cell adhesion molecule (N-CAM) or L1 isoform by an NG108-15 cell in vitro. Also described is a method of restoring or preserving motor function in mammal afflicted with or at risk from amyotrophic lateral sclerosis, multiple sclerosis or a spinal cord injury comprising administering a morphogen which is human osteogenic protein (OP-1), mouse OP-1, human OP-2, mouse OP-1 (undefined), bone morphogenetic protein (BMP)2A, BMP2B, DPP (undefined), Vg1 (undefined), Vgr-1, BMP3, BMP5, or BMP6. The present sequence erpresents the amino acid sequence of human OP-1 which was used as a reference sequence to generate generic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; osteogenic protein; OP-1; neuroprotective; amyotrophic lateral sclerosis; multiple sclerosis; spinal cord injury; morphogen; nerve cell adhesion molecule; N-CAM; L1 isoform; BMP2B; motor function; OP-2; 60A; GDF-1; bone morphogenetic protein; BMP2A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New treatment for amyotrophic lateral sclerosis, multiple sclerosis or spinal cord injury comprises administrating morphogen which stimulates expression of nerve cell adhesion molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BMP2B; DPP; Vg1; Vgr-1; BMP3; BMP5; BMP6.
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30-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 33-34; 57pp; English.
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23-SEP-1993;
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OPPERMANN H.
PANG R H L.
COHEN C M.
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92US-00922813.
93US-00126100.
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91US-00752764.
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The invention relates to a method for enhancing recovery of central nervous system function. The method involves administration of a morphogen comprising a dimeric protein and a pair of folded polypeptides to a mammal suffering trauma or ischaemia, where the morphogen is not transforming growth factor beta (TGP-beta). The method is useful for enhancing recovery of central nervous system function, i.e. motor coordination function (e.g. posture, balance, grasp or gait) or sensory perception (e.g. speech, vision, touch, taste proprioception or olfaction). The present sequence is human osteogenic protein 1 (hOp-1). Op-1 also referred as bone morphogenic proteins (BMPs) are classified under the subgroup of TGF-beta superfamily of growth factors

f central n of a d polypeptides

Method for enhancing recovery of central nervous system function comprises administration of a morphogen comprising a dimeric protein and a pair of folded polypeptides to a mammal suffering trauma or ischemia.

Claim 1; Col 37-40; 41pp; English.

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Best Local
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                                                                                                                                                                                                                                                                                                                         Central nervous system function; morphogen; ischaemia; grasp; trauma; motor coordination function; posture; balance; sensory perception; taste proprioception; olfaction; gait; human osteogenic protein 1; hOP-1;
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                                                                                                                                                                                                                                       C-terminal_seven_cysteine_domain
                                                                                                                                                                                                                         C-terminal_six_cysteine_domain
                                                                                                                                             SP
                                                                                                                                                                                                                                                                                                                                                     (hOP-1).
                                                                                                                                                                                                                                                                                                                                                                                            431
                                                                                                                                                                                                                                                     domain
                                                                                                                                                                                                                                                                 domain fragment"
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Pred. No. 1
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                                                                                                                                                                                                                                                   fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 5;
..8e-06;
s 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    431;
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Query Match Best Local

100.0%;

Length 431;

Sequence 431 AA;

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RESULT 175
ABB824
ABB824
AC ABB824
XX ABB824
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XX ABB824
XX ABB824
XX ABB824
XX TCP; b
KW bone i
XX TCP; b
KW bone i
XX Homo s
XX D12-SEF
XX D2-MAH
PR 21-SEF
XX D2-MAH
PR 21-SEF
XX D3-AB1
XX D1sc1
CC TDe i
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RESULT 176
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                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a porous beta-tricalcium phosphate (TCP) that comprises several pores. The pores are single separate voids having a pore diameter size of 20 - 500 (preferably 410 - 460, 40 - 190, 20 - 95 or 50 - 125) micro m. The beta-TCP induces bone formation, delivers bioactive agent at a site requiring cartilage formation, improves osteoconductivity and regeneration of bone tissue in a living body, repairs a bone defect in a human or animal. The porous beta-TCP granules are biocompatible and support the development of new bone throughout its structural form. The beta-TCP can be used in prosthetic device (e.g. hip device, fusion cage or maxillofacial device). It can be used for bone implantation in implantable device. The present sequence represents a human osteogenic protein-1 (OP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 200
N-PSDB;
                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 143-144; 151pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Porous beta-tricalcium phosphate material useful for bone implantation i implantable prosthetic device e.g. hip device, fusion cage or maxillofacial device, comprises several pores of specific diameter size.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dalal PS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-MAR-2001;
21-SEP-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB82416
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (STYC ) STRYKER CORP
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DB; ABV73237.
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implantation; osteogenic protein; human.
                                                                                      386
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20; Conserv
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20; Conser
                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                          INPETVPKPCCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                    431 AA;
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2001US-00960789
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                                                                                                                                                                                                                          100.0%;
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                                                                                                                                                                                                                             100.0%; Score 111; DB 5; 100.0%; Pred. No. 1.8e-06;
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                                                                                      405
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Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kulkarni
                                                                                                                                                                                                                                                      Length 431;
                                                                                                                                                                                                     Indels
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ABU56730
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XX
ABU5
ABU5
CCC comp
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                                                                                                                                                                                                                                                                                                                                                                                                                                    transcript in a cell from a patient, comprising contacting a biological CC sample from the patient with a polynucleotide that selectively hybridises CC to a sequence that is at least 80 % identical to a gene that exhibits CC increased or decreased expression in lung cancer samples. Fung cancer cassociated polynucleotides and polypeptides are used for identifying a compound that modulates a lung cancer-associated polypeptide, for CC compound that modulates a lung cancer-associated polypeptide. For CC cancer in a patient and for treating a mammal having lung cancer by CC cancer in a patient and for treating a mammal having lung cancer by CC cancer in a patient and for treating a mammal having lung cancer by CC compound that modulatory compound identified. The methods are useful for treating lung cancer, such as small cell lung cancer, non-small cell for treating lung cancer, such as small cell lung cancer, non-small cell lung cancer or other benign or precancerous lesions, e.g. atelectasis, CCC lung cancer or other benign or precancerous lesions, e.g. atelectasis, CCC compounds that purposes and as targets for screening for therapeutic for diagnostic purposes and as targets for screening for therapeutic compounds that modulate lung cancer, screening for the screening for 
                                                                                                                                                 Query Match
Best Local S
Matches 20
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10-MAY-2001;
09-NOV-2001;
13-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detecting a lung cancer-associated transcript in a cell from a patient for treating lung cancer, by contacting a biological sample from the patient with a polynucleotide that exhibits increased or decreased expression in lung cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lung cancer-associated polypeptide; cytostatic; emphysema; antiinflammatory; antiasthmatic; non-small cell lung cancer; atelectasis small cell lung cancer; benign lesion; precancerous lesion; bronchitis; chronic obstructive pulmonary disease; hypersensitivity pneumonitis; interstitial pulmonary fibrosis; fibrosis; asthma; bronchiectasis.
                                                                                                                                                                                                                                                                                                   Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a method for detecting a lung cancer-associated transcript in a cell from a patient, comprising contacting a biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 27; Page 438; 453pp; English
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12-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                             ABU56408-ABU56745 represent lung cancer-associated
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   386 INPETVPKPCCAPTQLNAIS
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                                                                                                                                                 l Similarity
20; Conser
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                                                                      INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                 100.0%; llarity 100.0%; Conservative 0
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; 2001US-0290492P.
; 2001US-0339245P.
; 2001US-0350666P.
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2002US-0372246P
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                                                                                                                                             Score 111; DB 6;
Pred. No. 1.8e-06;
Mismatches 0;
       405
                                                                                                                                                                                                                        Length 431;
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RESULT 177
ABR44022
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ABU63427
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DT 07-OCT
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Best Local (
                                                                                                                                                                                                                                      The invention relates to a bone precursor composition that comprises cement mixture or solid cement and a pore-forming agent. The pore-forming agent has a particle size of 20 - 500 micro M. The composition is useful for inducing bone formation; in prosthetic devices e.g. a hip device, fusion cage and a maxillofacial device, in ligament repair such as anterior cruciate ligament fixation or ligament attachment in the appendicular system to assist in the integration of ligament and bone; in clinical procedures for joint arthroplasty in hips, knee, elbows, and other joints where a diseased or damaged natural joint is replaced by a prosthetic joint; in clinical procedures such as vertebroplasty. Also useful for treating osteoporosis. The present sequence represents a human osteogenic protein (OP-1), a bone morphogenic protein (BMP) that can be used as a bioactive agent in the bone precursor composition of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bone precursor; osto
osteogenic protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-AUG-2003
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                                                                                                                                                                                                                                                                                                                                                                                                             Bone precursor composition useful for inducing bone formation comprises cement mixture or solid cement and pore-forming agent.
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                                                                                                                                                                                                           Sequence 431 AA;
                               07-OCT-2003
                                                    ABU63427
                                                                        ABU63427 standard; protein; 431 AA
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DB; ACC48170.
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                                                                                                                            386
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                                                                                                                                                                   1 Similarity
20; Conserv
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                                                                                                                            INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Landeryou
                                                                                                                                                                                                                                                                                                                                                                                         Page 98-99; 106pp; English.
                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein-1 (OP-1)
                                                                                                                                                                              100.0%;
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Pred. No. 1.8e-06;
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Human osteogenic protein 1,

OP1.

OP1; osteogenic protein-1; central nervous system; ischaemia; tissue-specific morphogenesis; OP-2; 60A; GDF-1; BMP-2A; BMP21growth differentiation factor-1; bone morphogenetic protein-2

BMP-2A; BMP2B; ;ic protein-2A;

trauma

Human osteogenic protein-1,

OP-1.

12-AUG-2003

(first entry)

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RESULT 179
ABU61634
ID ABU616
XX ABU616
XX ABU616
XX I2-AUG
DT 12-AUG
DT 12-AUG
XX Human
XX OP1, c
KW C1ssue
KW growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mimic body part to be replaced. Also included are a method for inducing in a mammal the formation of an autologous replacement body part comprising several distinct tissues, a method for repairing in vivo articular cartilage on the surface of a bone and a method for restoring in a mammal a non-mineralised tissue in a skeletal joint. The device is used for the manufacture of in vivo autogenous replacement body parts such as mammalian skeletal joints. The device is biocompatible, non-pathogenic and non-antigenic and thereby prevents graft rejection in vivo. The composition and method enables to provide complete reconstruction of a mechanically and functionally viable skeletal joint.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a device for implanting in vivo functional replacement body parts, comprises biodegradable matrix and an osteogenic protein (e.g. OP1, osteogenic protein 1) to induce formation and to permit regeneration of new distinct tissue(s). The matrix defines structure, allows attachment of infiltrating cells, comprises residues derived from distinct tissue(s) and having dimensions and shape which the direct tissue(s) and having dimensions and shape which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Device for implanting in vivo functional replacement body comprises biodegradable matrix and osteogenic protein to and to permit regeneration of new distinct tissue(s).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-JUN-1994; 94US-00253398
02-JUN-1995; 95US-00459129
13-APR-2000; 2000US-00547601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003064090-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 15-16; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Khouri RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-FEB-2002; 2002US-00083825
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 431
                                                                                                                                                                                                                                            ABU61634 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RUEG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  present sequence represents human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
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DB; ACD28509.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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ilarity 100.0%;
Conservative 0
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body; non-mineralised tissue; skeletal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rueger
                                                                                                                                                                                                                                              431
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Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 431;
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induce formation
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386

INPETVEKECCAPTQLNAIS 405

04-DEC-2003 ABR62827 ABR62827

(first entry

standard; protein; 431

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The invention relates to enhancing recovery of central nervous system CC function in a mammal, involves administering an effective amount of a C morphogen to a mammal afflicted with a central nervous system thighty comprises a dimeric comprises a dimeric comprises a dimeric comprises a pair of folded polypeptides. Each folded folde
  Query Match
Best Local (
                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enhancing recovery of central nervous system function e.g. ischemia and trauma, in a mammal, by administering morphogen comprising a dimeric protein capable of inducing tissue-specific morphogenesis, to the mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vgr-1; BMP-3; BMP-5; BMP-6; motor coordination function; posture; balance; grasp; gait; sensory perception; speech; stroke; hypertension; hypertensive cerebral vascular disease; aneurysm; angioma; blood dyscrasia; cardiac failure; cardiac arrest; cardiogenic shock; kidney failure; septic shock; head trauma; spinal cord trauma; seizure; tumour bleeding; loss of blood volume; blood pressure; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAR-1996;
21-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 21-22; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-FEB-2002; 2002US-00062370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003022830-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         morphogenic protein.
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  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHARETTE M F.
FINKLESTEIN S P.
                                                                         431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Finklestein SP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96US-00620444.
97US-00828281.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "C-terminal seven-cysteine domain. This domain
specifically claimed in claim 1"
100.0%;
Score 111; DB 7;
Pred. No. 1.8e-06;
                    Length 431;
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Matches

1 INPETVPKPCCAPTQLNAIS 20

0;

Mismatches

<u>,</u>

Gaps

0:

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RESULT 180
ABR62827
ID ABR628
XX ABR628
XX ABR628
XX Bone m
XW Bone m
XW Bone m
XW Ophtha
XX MO2003
PN WO2003
XX IO-JUL
PF 31-OCT
XX ALCO-
PA (UYNT-
PR WPI; 2
DR WPI;
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Best Local s
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is the protein sequence of human bone morphogenic protein 7 (SNP-7). RT-PCR showed BMP-7 to be expressed in the human trabecular meshwork and optic nerve head. A claimed method for diagnosing glaucoma involves detecting altered expression of a BMP family member such as BMP-7 by PCR in a sample obtained e.g. from blood or buccal cells. A claimed method for treating glaucoma comprises administering an agonist of BMP-2, BMP-4, BMP-5, BMP-7 or Smad 1/5, or an antagonist of chordin, gremlin or follistatin. A claimed method of identifying a therapeutic agent for treatment of glaucoma comprises identifying a substance that inhibits or stimulates BMP-induced Smad signalling pathways or BMP-regulated gene expression, using recombinant cells expressing BMP-2A, BMP-4, BMP-5 or BMP-7
Ovarian cancer-associated protein #29
                                                                  04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 431 AA;
                                                                                                                                                                                                           ADB80494 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig 4a-c; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Diagnosing glaucoma in a sample comprises detecting altered expression of bone morphogenic proteins in sample from a cell or bodily fluid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-OCT-2001; 2001US-0334852P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-OCT-2002; 2002WO-US035251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-JUL-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human bone morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ALCO-) ALCON INC.
(UYNT-) UNIV NORTH TEXAS HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2003-559253/52.
DB; ACF05923.
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                         405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 111; DB 7;
Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 431;
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RESULT 182
ABWOO7
XX
ABWOO7
AC ABWOO7
XX
15-JAN
XX
DT 15-JAN
XX
XX
DE Human
XX
XX
Parkin
XX
GDF-1;
XX
CS Homo s
                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a method of detecting an ovarian cancer-
associated transcript in a cell from a patient, by contacting a
biological sample from the patient with a polynucleotide that selectively
hybridizes to a sequence at least 80% identical to any of one of 80
nucleic acid sequences given in the specification. The method is useful
in diagnosing ovarian cancer and in identifying and using agents and/or
targets that inhibit ovarian cancer. The mucleic acid molecule,
polypeptide and the antibody may also be used in detecting ovarian
cancers, monitoring and early detection of relapse following treatment,
monitoring response to therapy, selecting patients for post-operative
chemotherapy or radiation therapy, in selecting mode of therapy,
and as vaccines. This sequence corresponds to one of the proteins used
for the detection method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Detecting an ovarian cancer-associated transcript in a cell from a patient, comprises contacting a biological sample from the patient polynuclectide that hybridizes to an ovarian cancer gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-UUN-2001; 2001US-0299234P.
27-AUG-2001; 2001US-0315287P.
05-SEP-2001; 2001US-0317544P.
13-NOV-2001; 2001US-0350666P.
12-APR-2002; 2002US-0372246P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour progno pre-cancerous lesion detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2002102235-A2
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mack DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUN-2002;
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                              Parkinson's disease; nerve-cell adhesion molecule; L1; DPP; Vg1; nigrostriatal pathway; therapy; morphogen; osteogenic protein; OlGDF-1; bone morphogenic protein; BMP; human.
                                                                                                                             15-JAN-2004
                                                                                             Human osteogenic
                                                                                                                                                                                            ABW00788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003-167431/16.
                                                                                                                                                                                                                                                                         386
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                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                           standard;
                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 294; 332pp; English.
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                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                     AA,
                                                                                                                             (first
                                                                                               protein (hOP)-1.
                                                                                                                                                                                           protein;
                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 7;
100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
                                                                                                                                                                                              431
                                                                                                                                                                                                                                                                                                                                                                       Length
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                                                                  Vgr-1;
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     RESULT 183
ADI39797
ID ADI397
XX ADI397
XX ADI397
XX 22-APR
XX YUMAN
DE Human
XX Parkin
XX Parkin
KW morpho
KW equili
KW nigros
XX XX Parkin
KW nigros
XX ADI397
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rueger DC,
                                  Parkinson's disease; therapeutic; therapy; osteogenic protein-1; OP-1; morphogen; motor coordination; tremor; rigidity; bradykinesia; equilibrium deficit; posture deficit; neuronal cell survival; neuropatingrostriatal pathway; cell adhesion molecule; CAM; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RUEG/)
(SAMP/)
(COHE/)
(OPPE/)
                                                                                                                  Human osteogenic protein (OP)-1.
                                                                                                                                                  22-APR-2004
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(first entry

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sapiens

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The invention relates to a method for treating Parkinson's disease which involves using a morphogen that stimulates production of a nerve-cell adhesion molecule or I1 by a specific cell in vitro. The invention is used to treat Parkinson's disease and to restore or preserve neural cell function in a mammal afflicted with Parkinson's disease. It is used to restore or maintain the integrity of the nigrostriatal pathway or to prevent degeneration of the nigrostriatal pathway in a mammal afflicted with Parkinson's disease. In the treatment method, morphogen may be complexed with a pro-domain polypeptide that is the pro-domain of osteogenic protein (OP)-1, OP-2, 60A, GDF-1, bone morphogenic protein (SMP)2A, BMPSB, DPP, VGI-1, BMPSB, DPB, OFB MPF-6. The present sequence is the human OP-1 protein. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-JUL-1992;
23-SEP-1993;
16-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treating Parkinsons disease comprises using a morphogen that stimulates production of a nerve-cell adhesion molecule or L1 by a specific cell in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-OCT-2002;
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                                                                                                                                                                                                                                                                                        Sequence 431
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DB; AAD61577.
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COHEN C M.
OPPERMANN H.
PANG R H L.
                                                                                                                                                                                                                        Similarity
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standard;
                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page
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                                                                                                                                                                                                100.0%;
ilarity 100.0%;
Conservative C
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94US-00260675
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protein;
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                                                                                                                                                                                                     0;
                                                                                                                                                                                                     Score 111; DB 7;
Pred. No. 1.8e-06;
Mismatches 0;
                                                                                                               405
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                                                                                                                                                                                                                                             Length 431;
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RESULT 184
ADJ62677
ID ADJ626
XX
AC ADJ626
XX
DT 06-MAY
XX
DT 06-MAY
XX
XX
MW human;
KW endoch
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                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to therapeutic methods and compositions for CC treating Parkinson's disease including methods of enhancing the survival CC of neural cells. A mammal with symptoms of Parkinson's disease is treated CC by administering a soluble human osteogenic protein (OP)-1 morphogen to CC the site of neutral damage or neuropathy in the mammal. The invention is CC consisting of motor coordination, tremor, rigidity, bradykinesia or CC deficits in equilibrium and posture, to restore motor function. The CC damaged neurons at the risk of dying, inducing the cellular repair of damaged neurons and neural pathways in a mammal, including enhancing the CC damaged neurons and neural pathways and stimulating the neurons to CC maintain their differentiated phenotype. It stimulates the expression of CC cell adhesion molecule (CAM) in neurons and enhances neuronal cell cell adhesion molecule (CAM) in neurons and enhances neuropathies in a CC mammal. It also provides means for evaluating the status of nerve tissue, including means provides means for evaluating the status of nerve CC tissue, including means activity associated with this pathway. The present
                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                              Query Match
Best Local
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30-AUG-1991;
31-JUL-1992;
23-SEP-1993;
   human; osteogenic endochondral bone
                                            Human osteogenic protein 1, OP1.
                                                                             06-MAY-2004
                                                                                                            ADJ62677
                                                                                                                                         ADJ62677
                                                                                                                                                                                                                                                                                                                                           Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treatment of mammal with symptoms of Parkinson's disease by administering soluble human OP-1 polypeptide morphogen containing amino acid sequence to site of neutral damage or neuropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-584258/55.
N-PSDB; ADI39796.
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Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 2; 44pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAR-1991;
                                                                                                                                                                                                                                                                              Local Similarity nes 20; Conserv
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                                                                                                                                         standard; protein; 431 AA
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                                                                                                                                                                                                                                                                                                                                                                          human osteogenic
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                                                                         (first entry)
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92US-00922813.
93US-00126100.
94US-00260675.
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330. .431
/note= "Specifically claimed in Claim
protein 1; OP1; osteogenic device;
formation; bone repair; cartilage repair;
                                                                                                                                                                                                                                                                                              100.0%;
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                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                        protein-1.
                                                                                                                                                                                                                                                                                             Score 111; DB 7;
Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                             Length 431;
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RESULT 185 ADN39200

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386 ш

INPETVEKECCAPTQUALS 405 INPETVPKPCCAPTQLNAIS 20 Similarity 20; Conserv

Conservative

0

Gaps

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Query Match
Best Local S
Matches 20
                                                                               The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammals. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammalian body. The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of the human osteogenic protein 1, OP1.
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 200
N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
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18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                        Sequence 431
                                                                                                                                                                                                                                                                                                                                               Osteogenic device useful for inducing endochondral bone formation mammals, comprises ceramic or biodegradable non-collagen polymer m containing substantially pure natural-sourced mammalian osteogenic
                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO 2; 127pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG-1990;
07-SEP-1990;
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15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                      protein.
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01-NOV-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vascularisation; mineralisation; bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (STYC ) STRYKER CORP.
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DB; ADJ62676, ADJ62678.
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90US-00621988.
91US-00660162.
91US-00810560.
92US-00827052.
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93US-00147023.
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88US-00232630
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100.0%; Score 111; DB 7;
100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
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                             Length 431;
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ADN39200 standard;

protein;

431 A

(first

entry.

sequence represents

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polypeptide

of the invention

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17.00

Afar Mack

H,

Aziz N, Murray

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Ginsburg WM, R, Watson SR,

Gish KC, Gi Wilson KE,

2003-468649/44. DB; ADN39199.

(EOSB-)

BIOTECHNOLOGY INC

Claim 12;

SEQ ID NO

1385pp; English.

13-NOV-2001; 2001US-0350666.
21-NOV-2001; 2001US-03343939.
29-NOV-2001; 2001US-03353949.
03-DEC-2001; 2001US-03453949.
14-DEC-2001; 2001US-03463769.
08-FEB-2002; 2002US-03473499.
08-FEB-2002; 2002US-03552509.
13-FEB-2002; 2002US-03552509.
29-MAR 2002; 2002US-03568099.
04-APR-2002; 2002US-03688099.
04-APR-2002; 2002US-03686149.
15-APR-2002; 2002US-03866149.
16-UUL-2002; 2002US-03968399.
22-UUL-2002; 2002US-03984509.
09-SEP-2002; 2002US-0398459.

13-NOV-2002;

2002WO-US036810

WO2003042661-A2 Homo sapiens

The invention relates to nucleic acids and proteins (ADN38683-ADN40064) whose expression is upregulated or downregulated in specific cancers or cother diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The compression vectors and host cells comprising a nucleic acid of the invention, antibodies which specifically bind a nucleic acid of the invention, antibodies which specifically bind a polypeptide of the invention; antibodies for drug targeting; and methods of screening for modulators of activity or expression of the collypeptides and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, inchaemia, heart disease, cancer and other conditions such as psoriasis, inchaemia, heart disease, retinal concervascularistaion syndromes, scarring and uterine fibroids. They may calso be useful in wound healing and in contraception. The present

Claim 12; SEQ H ŏ A69; 1385pp; English.

The invention relates ď nucleic acids and proteins (ADN38683-ADN40064) 8 Ś 55655555555555555555555555555 ADN39488 RESULT 187 cc whose expression is upregulated or downregulated in specific cancers or cother diseases such as angiogenic or fibrotic disorders, and to methods cc of determining the presence or absence of a pathological cell in a cc patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The cc invention also relates to expression vectors and host cells comprising a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of screening for modulators of activity or expression of the cc and methods of screening for modulators of activity or expression of the cc antibodies and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, caherosclerosis, inflammatory diseases, autoimmune diseases, retinal conversion in wound healing and uterine fibroids. They may calso be useful in wound healing and in contraception. The present cc sequence represents a polypeptide of the invention. Query Match Best Local S Matches 20 13-FEB-2002 20-FEB-2002 20-FEB-2002 29-MAR-2002 29-MAR-2002 12-APR-2002 15-JUN-2002 16-JUL-2002 22-JUL-2002 22-JUL-2002 29-SEP-2002 13-NOV-2001; 21-NOV-2001; 08-JAN-2002; 10-JAN-2002; 22-MAY-2003 14-DEC-2001; WO2003042661-A2 vulnerary; gene therapy; vaccine detection; diagnosis; prognosis; drug screening; Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; athe inflammatory disease; autoimmune disease; Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:A88 17-JUN-2004 wound healing; contraception; cytostatic; cardiant; retinal neovascularistaion syndrome; ADN39488 standard; protein; 431 Sequence 431 AA; 386 \vdash Similarity 20; Conser INPETVPKPCCAPTQLNAIS 405 INPETVPKPCCAPTQLNAIS 20 2001US-0340376P.
2002US-0347341P.
2002US-0347349P.
2002US-0355250P.
2002US-0356714P.
2002US-0356809P.
2002US-0370110P.
2002US-0370110P.
2002US-0386849P.
2002US-0386849P.
2002US-0396839P.
2002US-0396839P. 100.0%; larity 100.0%; Conservative 0 2001US-0350666P. 2002WO-US036810 (first entry) 0 Score 111; DB 7; Pred. No. 1.8e-06; ; Mismatches 0; scarring; uterine fibroid; disease; atherosclerosis; drug targeting; Length 431; 0; Gaps

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В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CC whose expression is upregulated or downregulated in specific cancers or coher diseases such as angiogenic or fibrotic disorders, and to methods CC of determining the presence or absence of a pathological cell in a CC partient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The CC invention also relates to expression vectors and host cells comprising a CC nucleic acid of the invention; antibodies which specifically bind a CC nucleic acid of the invention; antibodies which specifically bind a CC polypeptide of the invention; use of such antibodies for drug targeting; CC and methods of screening for modulators of activity or expression of the CC polypeptides and methods are useful for diagnosting, prognosing and treating CC cancer and other conditions such as psoriasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal CC neovascularistation syndromes, scarring and uterrine fibroids. They may CC also be useful in wound healing and in contraception. The present of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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 13-NOV-2001;
21-NOV-2001;
29-NOV-2001;
03-DEC-2001;
                                                                                                                                                                                                                  inflammatory disease; autoimmune disease; retinal neovascularistation syndrome; scarring; uterine fibroid; detection, diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining the presence or absence of a pathological useful for diagnosing, prognosing or treating cancer, a nucleic acid in a biological sample.
                                                                                   13-NOV-2002;
                                                                                                                                                     WO2003042661-A2
                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                 human; differential expression; cancer; angiogenic disorder;
fibrotic disorder; psoriasis; ischaemia; heart disease; athe
information.
                                                                                                                                                                                                                                                                                                                                                        Cancer/angiogenesis/fibrosis-related polypeptide,
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Mack
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; SEQ ID NO A88; 1385pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 Similarity
20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 INPETVPKPCCAPTQLNAIS 20
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Murray R,
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2001US-0332464P.
2001US-0334393P.
2001US-0335394P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; ilarity 100.0%; Conservative
                                                   2001US-0350666P
                                                                                   2002WO-US036810
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R, Watson SR,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 7;
Pred. No. 1.8e-06;
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Wilson KE,
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E, Zlotnik
                                                                                                                                                                                                                                                                                                        disease; atherosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
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                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO: A125.
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A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cell in a patient, comprises detecting
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The invention relates to nucleic acids and proteins (ADN38683-ADN40064) CC whose expression is upregulated or downregulated in specific cancers or cother diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a cc pathent by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The cc invention also relates to expression vectors and host cells comprising a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; use of such antibodies for drug targeting; cand methods of screening for modulators of activity or expression of the collypeptides and mucleic acids. The nucleic acids, polypeptides, cancer and other conditions such as psoriasis, ischaemia, heart disease, catherosclerosis, inflammatory diseases, autoimmune diseases, retinal neovascularistaion syndromes, scarring and uterine fibroids. They may calso be useful in wound healing and in contraception. The present cx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                       protein; OP1; CBMP2A; CBMP2B; osteogenic device; formation; cartilage formation; non-union fractu
                                                                                                                                                                                                                                                                                                          Length 431;
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22-FEB-1991,
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28-JAN 1992,
21-FEB-1992,
21-DEC-1992,
01-NOV-1993,
23-MAY-1995,
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18-OCT-1990;
18-OCT-1990;
The invention relates to an osteogenic device for implantation in a mammal, comprising osteogenic protein (OP) dispersed within a biocompatible, in vivo biodegradable matrix, where OP comprises a pair (P) of unglycosylated protein chains disulphide bonded to produce dimeric species having a conformation so that (P) is capable of inducing endochondral bone formation in mammal when disposed in the matrix and accessible to the cells. Also included are substantially a pure mammalian osteogenic protein (comprising a pair of unglycosylated polypeptide chains and capable of inducing endochondral bone formation in association with a matrix when implanted in a mammal, where the osteogenic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                       Osteogenic device for inducing endochondral bone formation, osteogenic protein comprising a pair of unglycosylated prot disulfide bonded to produce dimeric species, dispersed with
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04-DEC-1990;
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23-FEB-1989,
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                                                                                                                                                                            biocompatible matrix.
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P-PSDB; ADE52747.
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OZKAYNAK E.
KUBERASAMPATH
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SEQ ID NO A125; 1385pp;

English

Afar Mack

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Aziz N, G: Murray R,

Ginsburg V R, Watson

τ WM, τ SR,

Gish KC, G Wilson KE,

Glynne R, E, Zlotnik

(EOSB-)

SOB

BIOTECHNOLOGY INC

16-JUL-2002; 2002US-0396839P. 16-JUL-2002; 2002US-0396839P. 22-JUL-2002; 2002US-0397775P. 22-JUL-2002; 2002US-0397845P. 09-SEP-2002; 2002US-0409450P.

2002US-0370110P. 2002US-0372246P. 2002US-0386614P.

14 DEC-2001;
08 -UAN-2002;
10 JAN-2002;
08 FEB-2002;
08 FEB-2002;
20 FEB-2002;
24 APR-2002;
12 APR-2002;

; 2001US-0340376P. 2002US-0347211P. 2002US-0347349P. 2002US-0355250P. 2002US-0356714P. 2002US-0359077P. 2002US-0368809P.

RESULT 189
ADES274
ID ADES27
AC ADES27
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XX 29-JAN
XX 29-JAN
XX 4W Human
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ADE52748 ADE52748

standard;

protein; 431

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Human osteogenic protein,

OP1.

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entry

Homo sapiens

Human; osteogenic endochondral bone

fracture;

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386

INPETVPKPCCAPTQLNAIS 405 INPETVPKPCCAPTQLNAIS 20 Query Match Best Local S Matches 20

20;

Similarity 100 20; Conservative

0

Score 111; DB 7; Pred. No. 1.8e-06; ; Mismatches 0;

100.0%;

Sequence 431

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Best Local
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16-MAR-2001; 2001US-00809269.
23-MAR-2001; 2001US-00809229.
17-JAN-2002; 2002US-0344621P.
22-JAN-2002; 2002US-0349356P.
28-JAN-2002; 2002US-0354265P.
06-FEB-2002; 2002US-0354265P.
15-FEB-2002; 2002US-0354269P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; bone morphogenic protein; BMP; weight gain; appetite suppression; fat mass reduction; cell sensitivity; glucose uptake; diabetes; insulin resistance; hyperglycaemia; hypertension; coronary artery disease; renal failure; neuropathy; metabolic disorder; glucose metabolism disorder; endocrine disorder; bone sity; weight loss; liver disorder; artilage growth disorder; bone growth disorder; inflammation; aberrant cell growth; liver cancer.
        (YOUN/) YOUNG
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Pred. No. 1.8e-06;
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CC polypeptides and the polymucleotides encoding them. The invention also

CC relates to a method for limiting weight gain, suppressing appetite or

CC reducing fat mass, comprising administering to a mammalian subject a

CC therapeutic amount of a BMP polypeptide, and a method for increasing the

CC sensitivity of a cell to insulin or increasing glucose uptake by a cell,

CC comprising contacting the cell with a BMP polypeptide. The BMP

CC polypeptides and polymucleotides are useful for diagnosing a pathological

CC condition or a susceptibility to a pathological condition in a subject or

CC diabetes, insulin resistance, hypersylvaemia, hypertension, coronary

CC diabetes, insulin resistance, hypersylvaemia, hypertension, coronary

CC diabetes, insulin resistance, hypersylvaemia, hypertension, coronary

CC diabetes, cartilage and bone growth disorders, plucose

metabolism disorder, endocrine disorders, obesity, weight loss, liver

CC disorders, cartilage and bone growth disorders, inflammation or aberrant

CC cell growth such as liver cancer. The BMP polypeptides and

CC limiting weight gain, suppressing appetite, reducing fat mass, increasing

CC the sensitivity of a cell to insulin or increasing glucose uptake by a

CC cell. This sequence represents a human BMP polypeptide of the invention.
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Matches
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                                                                                                                                                                                           antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; noctropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiparkinsonian; desmatological; antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infection; anorexia; cancer; cardiovascular; hypertension; atherosclerosis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; inmune; osteoarthritis; haemopoletic; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; proliferation; haemopolesis; wound healing; anglogenesis; gene therapy; chromosome mapping; tissue typing; pharmacogenomic; human.
   13-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 431
                                                                     WO2003093432~A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NOVX; antidiabetic; anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human NOV1c protein - SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADH17316 standard; protein; 431 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               neuropathy.
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cardiant; hypotensive;
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02-MAY-2003;

2003WO-US013690

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CC cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, cantibacterial, fungicide, protozoacide, nootropic, neuroprotective, cc antiparkinsonian, anticonvulsant, osteopathic, antiarthritic, cantivities. The polypeptides, nucleic acid molecules and antilpaemic activities. The polypeptides, nucleic acid molecules and antibodies may be useful in the manufacture of a medicament for treating metabolic consists, helminthic, and protozoal), anorexia, cancer, cardiovascular consists, such as osteoarthritis, haemopoietic disorders, inflammatory consists, disorders, inflammatory consists, disorders, inflammatory consists, and polypeptides may also be used as targets for the identification consists, in gene therapy and the in generation of antibodies that colling and consists, in gene therapy and the in generation of antibodies that consists methods. The nucleic acids may be further used as a target for use in therapeutic or consists methods. The nucleic acids may be further used as preventive medicine and pharmacogenomics. The current sequence is that of the human cover consists of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAY-2002; 2002US-0377321P.
08-MAY-2002; 2002US-0383075P.
24-MAY-2002; 2002US-0384044P.
29-MAY-2002; 2002US-0384295P.
30-MAY-2002; 2002US-0384295P.
30-MAY-2002; 2002US-0384327P.
30-MAY-2002; 2002US-0384327P.
31-MAY-2002; 2002US-0384327P.
31-MAY-2002; 2002US-0383211P.
02-UUL-2002; 2002US-0383211P.
03-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-0402159P.
22-AUG-2002; 2002US-0402159P.
23-SEP-2002; 2002US-040175P.
24-CCT-2002; 2002US-0412954P.
30-SEP-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0422847P.
01-MAY-2003; 2002US-0422847P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alvarez E, Anderson DW, Boldog FL, Catterton E, Edinger SR; Fernandes ER, Gerlach VL, Gorman L, Grosse WM, Guo X, Ji W, Kekuda R, Li L, Macdougall JR, Padigaru M, Patturajan M; Peterson JD, Rastelli L, Shimkets RA, Spytek KA, Stone DJ; Vernet CAM, Voss EZ, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel isolated NOVX polypeptide. The polypeptide of the invention demonstrates antidiabetic, annorectic cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 6; 478pp; English.
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Query Match
Best Local Similarity 100.0%; 1
Matches 20; Conservative 0;

Score 111; DB 8; Pred. No. 1.8e-06; ; Mismatches 0;

Length 431; Indels

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ADM80486

RESULT 193 ADM80486

ADM80486

standard;

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INPETVPKPCCAPTQLNAIS

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Score 111; DB 8 Pred. No. 1.8e-0 0; Mismatches

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Length 431;

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RESULT 192
ADIZ5169
ID ADIZ51
AC ADIZ51
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XX 15-APR
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KW ligame
KW ligame
KW aggrec
XX 99-JUL
PR 09-JUL
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                                  The invention relates to a novel method for treating a ligament defect in a patient. The method involves: administering to the patient an effective amount of a bone morphogenic protein, transfecting the cultured ligament cells with a nucleic acid sequence encoding a bone morphogenic protein or a growth factor; treating the cultured ligament cells with a bone morphogenic protein, and culturing the ligament cells for a time sufficient to allow formation of a ligament cells for a time the ligament cell-associated matrix is chosen from type 1 collagen, elastin, decorin and aggrecan. The invention further includes a composition comprising cultured ligament cells and a bone morphogenic protein. The method of the invention is useful for treating (repairing, regenerating, forming or promoting) a ligament defect in a patient. This sequence represents a bone morphogenic protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                Treating ligament defects in patients, involves isolating ligament culturing ligament cells ex-vivo, recovering cultured ligament cell implanting the recovered ligament cells into the patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-132719/13.
N-PSDB; ADI25178.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-JUL-2002; 2002US-0395110P.
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ligament
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  Sequence 431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                defect; bone morphogenic protein; growth factor;
cell-associated matrix; type 1 collagen; elastin; decorin;
; OP-1; osteogenic protein-1; human.
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Matches 20
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15-AUG-1988;
28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
24-MAY-1995;
                                                                                                                                                         for inducing cartilage or endochondral bond formation in a mammal comprising the step of implanting the mammal at a locus accessible to migratory progenitor cells. The device is useful for inducing local cartilage bone formation and endochondral bone formation in a non-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein is useful for selectively extracting osteogenic protein from a mixture of molecules. The present sequence represents the amino acid sequence of the human osteogenic protein, OP1.
                                                                                                                                                                                                                                                                                        The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein dispersed within biocompatible matrix defining pores, differentiation, and proliferation of migratory progenitor cells from body of mammal, improvement where osteogenic protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a non-union fracture in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage repair in a mammal, for use in migratory as the device is useful to the procedures of the cartilage repair in a mammal, for use in mammal, for use in periodontal bone reconstructive procedures.
                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-167144/16.
N-PSDB; ADM80485, ADM80487.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cartilage repair.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-JUN-2004 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  comprising pair
bone formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Opperman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (STYC)
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386
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l Similarity 100
20; Conservative
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INPETVPKPCCAPTQLNAIS
                          INPETVPKPCCAPTQLNAIS 20
                                                                                                                              431 AA;
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bone formation; non-union fracture; cartilage formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002US-00321799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88US-00179406.
88US-00232630.
92US-00827052.
92US-00841646.
93US-00147023.
95US-00449699.
98US-00148925.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; 136pp; English
                                                                             . 0%;
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405
                                                               Mismatches
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No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inducing endochondral
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                                                                                                                                                             This invention relates to a novel method for treating or preventing CC chronic renal failure and other associated mammalian renal disorders. CC chronic renal failure and other associated mammalian renal disorders. CC Specifically, it refers to cojointly administering osteogenic protein CC (OP) or bone morphogenetic protein (BMP) morphogens with an angiotensin CC converting enzyme (ACB) inhibitor, in particular the angiotensin II C receptor antagonist/ blocker (AIRA). The present invention describes using these compositions as inducers of proliferation and differentiation of renal tissue, and as such can be used to prevent, inhibit, delay or CC alleviate the progressive loss of renal function and the decline in CC glomerular filtration rate (GPR) characterised by chronic renal failure. CC Furthermore, they can be useful for treating conditions such as end-stage renal disease (ESRD), chronic diabetic nephropathy, diabetic glomerulopathy, diabetic renal hypertrophy, hypertensive nephrosclerosis, Chronic glomerulonephritis, hereditary CC nephritis and renal dysplasia where the mammal is a kidney transplant recipient. Accordingly, compositions exhibit antidiabetic, nephrotropic, antininflammatory and vasotropic activities. This polypeptide sequence is CC antininflammatory and vasotropic activities. This polypeptide sequence is
                                                                                 Matches
                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating or preventing chronic renal failure in mammal, comprises conjointly administering osteogenic proteins/bone morphogenetic proteins morphogen and angiotensin-converting enzyme inhibitor to mammal.
                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 60; SEQ ID NO 3; 365pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; ADK90642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chronic diabetic nephropathy, diabetic glomerulopathy; diabetic renal hypertrophy; hypertensive nephroscierosis; hypertrensive glomerulosclerosis; chronic glomerulonephritis; hypertrensive glomeruloscierosis; chronic glomerulonephritis; hereditary nephritis; renal dysplasia; antidiabetic; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   angiotensin-converting enzyme inhibitor; ACE; angiotensin II receptor antagonist; AIIRA; end-stage renal chronic diabetic nephropathy; diabetic glomerulopathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Charette MF, Hruska KA, Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-AUG-2002; 2002US-0406431P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-AUG-2003; 2003WO-US026923.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antiinflammatory; vasotropic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004019876-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic protein 1 morphogen SeqID 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bone morphogenetic protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; chronic renal failure; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK90628 standard; protein; 431 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2004-282635/26
386 INPETVPKPCCAPTQLNAIS 405
                                                                              20;
                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURIS INC.
UNIV WASHINGTON
                                                                                                                                                             431 AA;
                                      INPETVPKPCCAPTQLNAIS 20
                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                100.0%;
                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BMP; morphogen
                                                                                                Score 111;
Pred. No. 1
                                                                                 Mismatches
                                                                                                DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       osteogenic
                                                                                                                 Length 431;
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RESULT 195

protein; 431 AA

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ADM32623
ID ADM32623 standard; p
XX
AC ADM32623;
XX
DT 17-JUN-2004 (first
XX
Prepro form of Human
XX
Numan; bone morphoge
KW human; bone morphoge
KW inflammation; immuno
KW inflammation; immuno
KW inflammation; immuno
KW inflammation; immuno
KW Prepride 1.
FT Peptide 7.1ab
FT Peptide 7.1ab
FT Protein 293.
FT Protein Envolves corper with osteo-inductive process is sequence represent method is the CC process is carried of crankle joint. The CC inflammation due to corpe entitates and stif CC into osteo-laducts, in titates and stif CC into osteo-laducts, in to sequence 201 into osteo-laducts, in the CC inflammation and to colless time-consuming CC into osteo-laducts, in titates and stif CC into osteo-laducts, in the CC into osteo-laducts, in the CC into osteo-laducts, in the CC into osteo-laductive cC into osteo-laducts, in the CC into osteo-laductive cC into osteo-laducts, in the CC into osteo-laducts, into osteo-laducts, into CC into osteo-laducts, into CC into osteo-laductive cC into osteo-
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                                                                                                                                                                                                                                                                            This sequence represents the prepro form of human bone morphogenic CC protein (BMP-7). This protein was used in the production of a device (D1) which involves contacting a solution (A) with a carrier (B) having a CC surface of metal or metal alloy to coat the surface with (B), and drying CC of the coated carrier (A) comprises an osteoinductive protein. The CC process is carried out under a reduced concentration of oxygen CC (preferably less than 10 vol.*). The device may be used in the CC preparation of a pharmaceutical composition for osteo-integration and new CC bone formation in treatment of e.g. traumatic, malignant, artificial or CC contact, or for the treatment of hip, elbow, spine, knee, finger CC ankle joint. The method eliminates undesirable side effects such as CC inflammation due to the enhanced immunogenicity of oxidized proteins; is CC less time-consuming and economical. The device manufactured by the CC present method is free of toxic substances. The device with the coating CC of osteo-inductive protein distributes the protein evenly and efficiently; initiates and stimulates the transformation of mesenchymal stem cells into osteoblasts, hence accelerates the bone formation.
                                                                                                                    Query Match
Best Local :
                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Production of devices useful for e.g. new bone formation in dental defects, involves coating carrier having metal or metal alloy surface with ostee-inductive protein solution and drying under reduced oxygen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human; bone morphogenic protein; BMP-2; metal alloy; osteoinductive protein; osteo-integration; bone formation; trauma; mailgnancy; deptal defect; hip; elbow; spine; knee; finger; ankle; inflammation; immunogenicity; transformation; mesenchymal stem cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 15; 68pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-294993/27.
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                                                                                                                        Similarity
INPETVPKPCCAPTQLNAIS
                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TECHNOLOGY GMBH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beaucamp N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= Propeptide
293. .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= Signal peptide
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/label= hBMP7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           292
                                                                                        100.0%; Score 111; DB 8;
100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
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                                                                                                                                                    Length
                                                                                               Indels
                                                                                                                                                               431;
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                                                                                               Gaps
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386

INPETVPKPCCAPTQLNAIS 405

RESULT 197
AD049073
ID AD0490
XX
AC AD0490
XX
DT 26-AUG
XX

protein; 431 AA

0

26-AUG-2004 ADC49073; ADC49073

(first entry)

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RESULT 196
ADO361
XX ADO361
XX ADO361
XX ADO361
XX PROPORTION OF THE MEMORY OF THE ADO361
XX METANAL CARLES OF THE ADO361
XX CARLES OF
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                                                                                                                         Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                          The invention describes memory stores atomic X-ray crystallographic coordinates defining a portion of human transformation and differentiation factor-1 (hTDF-1). A processor communicates with the memory to generate a molecular model having a three-dimensional shape representing portion of hTDF-1. Also described is a morphogen analogue production method. The system is useful for designing, identifying and producting molecules which act as functional mimetics of tissue morphogenic protein, TDF-1. The molecule is designed with enhanced solubility and stability under physiological condition. Also the biological activity of the hTDF-1 in mammal is enhanced. This is the amino acid sequence of human transformationand differentiation factor-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CARL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Computer system for producing tissue morphogenic protein analogs, has memory to store atomic X-ray crystallographic coordinates defining portion of human transformation and differentiation factor-1 (hTDF-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             morphogen analogue production; tissue morphogenic protein; tissue morphogenic protei mimetic; solubility; stability; protein co-ordinate data.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     memory stores atomic X-ray crystallographic coordinate; human; transformation and differentiation factor-1; TDF-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human transformation and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AD036195
                                                                                                                                                                                                                                                          Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 1; 82pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carlson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-NOV-2002; 2002US-00290554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-NOV-2002; 2002US-00290554.
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                                                                                                                             20;
                                                1 INPETVPKPCCAPTQLNAIS
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U
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                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard; protein;
   INPETVPKPCCAPTQLNAIS
                                                                                                                             100.0%; Silarity 100.0%; For Conservative 0;
                                                                                                                                                                                                                                                             A,
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                                                                                                                                Score 111; DB 8;
Pred. No. 1.8e-06;
); Mismatches 0;
      405
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                                                                                                                                                                                               Length 431;
                                                                                                                                       0
                                                                                                                                       Gaps
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Human dedifferentiation factor BMP-7, SEQ

ID NO:28

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cc method of regenerating mammalian tissues and/or organs by
Cc dedifferentiating mammalian cells so that they become capable of
Cc redifferentiation to regenerate the tissue and/or organ. A variety of
Cc dedifferentiation to regenerate the tissue and/or organ. A variety of
Cc dedifferentiation factors may be used in the methods of the invention.
Cc These include extracts from animals (especially newts) that are capable
Cc of regenerating organs or tissues; growth factors, such as members of the
Cc fibrollast growth factor (FGFRs); bone morphogenetic proteins (BMPs); Wnt
Cc growth factor receptors (FGFRs); bone morphogenetic proteins (BMPs); Wnt
Cc family members, and other proteins that promote Wnt signalling such as
Cc beta-catenin and lefl/Tof; the intracellular factors Msx1 and Msx2;
Cc cyclinDl; cyclin-dependent kinase 4 (Cdk4); agents which promote FGF, BMP
Cc or Wnt signalling; and inhibitors of Msx3, GSK3-beta, plf, p21 or p27
Cc expression or activity. The methods and compositions of the invention may
Cc be used for dedifferentiating mammalian cells in vivo and in vitro. The
Cc dedifferentiated cells can then be redifferentiated to regenerate desired
Cc tissues and/or organs. Tissue regeneration is useful in the treatment of
Cc cardiovascular disease, or myocardial inferction); cancers and
Cc cancer-related conditions; joint diseases (e.g., rheumatoid arthritis,
Cc osteoarthritis, or osteoporosis); eye-related degeneration (e.g.,
Cc disease, cystic fibrosis or emphysema), metabolic disorders (e.g.,
Cc diabetes); genito-urinary disorders (e.g., renal failure); neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method of dedifferentiating a differentiated mammalian cell. The method comprises administering one or more agents which: (a) increases the expression and/or activity of a G1 Cdk complex; (b) decreases expression of one or more markers of differentiation; (c) promotes cell cycle reentry; or (d) increases the expression of one or more progenitor or stem cell markers. The invention also relates to a method of screening for dedifferentiation agents; the dedifferentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dedifferentiating a differentiated mammalian cell comprises administering an agent that increases G1 Cdk complex or cell marker expression, promotes cell cycle reentry, or decreases differentiation marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agents identified and pharmaceutical compositions containing them; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 28; 301pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genito-urinary disorder; renal failure); neurological disorder; dementia; Alzheimer's disease; endocrine disorder; hypothyroidism; vasotropic; arteriosclerotic; cytostatic; osteopathic; antiarthritic; neutrineumatic; ophthalmological; auditory; respiratory; antidiabetic; nephrotropic; nootropic; neuroprotective; cell therapy; dedifferentiation factor; bone morphogenetic protein; BMP-7; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteoarthritis; osteoporosis; eye disorders; cataract; retinal degeneration; macular degeneration; ear degeneration; hearing loss; lung disorder; chronic obstructive pulmonary dicystic fibrosis; emphysema; metabolic disorder; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dedifferentiation; mammalian cell; tissue regeneration; epimorphosis; G1 Cdk complex; drug screening; cardiovascular disease; atherosclerosis; coronary artery disease; obstructive vascular disease; myocardial infarction; cancer; joint disease; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Keating MT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-NOV-2002; 2002US-00302812
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RESULT 198
ABB07965
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អនុស្ត្រស្ត្រស្ត្រស្ត្រស្ត្
                                                           Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                          The invention provides an osteogenesis stimulating fused protein (I) for a drug delivery system (DDS) of osteogenetic factor, having collagen avidity and polypeptides homologous to collagen avidity domain or its modified peptides (I) is used for stimulation of osteogenesis, a localizing agent and a slow releasing agent for a drug delivery system. The present sequence represents a human fibronectin collagen-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disorders (e.g., dementia or Alzheimer's disease); and endocrine disorders (e.g., hypothyroidism). With the exception of liver tissue, mammals are incapable of regenerating a tissue or organ following injury (a process known as epimorphosis, which occurs in aniamis such as newts, axolotis and teleost fish); instead, the missing tissue is replaced with non-functional scar tissue. The methods of the invention provide a means in which missing or damaged tissue can be replaced with functional tissue. The present sequence represents a protein which acts as a dedifferentiation factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Synthetic.
                                                                                                                  Sequence 473 AA;
                                                                                                                                                                                                                                                                Disclosure;
                                                                                                                                                                                                                                                                                              Novel osteogenesis stimulating fused protein having collagen avidity used as an osteogenesis stimulator and a localizing agent.
                                                                                                                                                                                                                                                                                                                                           N-PSDB; ABL41028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Osteogenesis; fibronectin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human fibronectin collagen-binding domain/BMP7 hybrid protein
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                                                                                                                                              domain/human BMP7 hybrid protein
                                                                                                                                                                                                                                                                                                                                                                                     (TERU ) TERUMO CORP
                                                                                                                                                                                                                                                                                                                                                                                                                16-AUG-2000; 2000JP-00246744.
                                                                                                                                                                                                                                                                                                                                                                                                                                            16-AUG-2000; 2000JP-00246744.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP2002058485-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                Page 26-28; 30pp; Japanese.
                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            drug delivery system; DDS; collagen; osteopathic; BMP7; hybrid; fusion protein.
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                                                                         Score 111; DB 9
Pred. No. 2e-06;
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Pred. No. 1.8e-06;
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                                                           Mismatches
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                                                                                     5
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                                                                                    Length 473;
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                                                           Gaps
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07-SEP-1990;
18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
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01-JUL-2002
06-JUN-1994
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04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                       15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR44751
                 The fusion protein encodes the entire prepro form of OP1 (AAR44746) linked to a leader sequence (residues 1-53) suitable for promoting expression in E. coli. The protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-JUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osteogenic
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22-FEB-1990;
                                                                                                                                                                                                                                                                                                                                                                                                      08-APR
                                                                                                                                                                                                                                                                                                                                                                                                                           21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                               30-NOV-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vascularisation;
                                                                                                                                            New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                                                                                        Kuberasampath
Sequence
                                                                                                                                                                                                                            (STYC )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                    1993-395405/49.
                                                                                                                                                                                                                            STRYKER
                                                                                                                                                                         AAQ53147.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
  484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fusion
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(revised)
(first en
                                                                                                                                                                                                   Т,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
1. .53
/label= Leader sequence.
61. .316
                                                                                                                                                                                                                                                                  89US-00422699
90US-00483913
90US-00569920
90US-00579865
90US-00599543
90US-00616374
90US-0062188
90US-00621988
                                                                                                                                                                                                                                                                                                                                                                                 88US-00179406.
88US-00232630.
89US-00315342.
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92US-00827052
                                                                                                                                                                                                                                                                                                                                                                          89US-00422613
                                                                                                                                                                                                                                                                                                                                                                                                                            92US-00841646
                                                                                                                                                                                                                            CORP.
                                                                                                                        105-110; 128pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in; bone; cartilage; matrix; osteoarthritis; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein OP1C
                                                                                                                                                                                                         Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Prepro form of OP1."
                                                                                                                                                                                                         M
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                                                                                                                                                                                                         Rueger DC,
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                                                                                                                        English.
                                                                                                                                                                                                        Pang
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                                                                                                                                                                                                         Oppermann
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Query Match Best Local Similarity

100.

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Score Pred.

111; DB 2; No. 2e-06;

Length 484;

AAQ72713 encodes AAR51657 the osteogenic fusion protein 1C (OP1C) which includes a MLE leader sequence suitable for promoting expression in E. coli. Fragments of the osteogenic unglycosylated polypeptides produced can be disulphide bonded to form dimers, which form an essential component of an osteogenic protein. This protein is dispersed in a biodegradable matrix which can be implanted into a mammalian bone marrow

marrow

Disclosure;

Col 105-108; 128pp; English

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RRESULT 200
RARSILT 200
RARSILT XX
AARSIL
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18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
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01-JUL-2002
09-JUN-1995
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17-OCT-1989;
17-OCT-1989;
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Peptide
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15-AUG-1988;
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                                                                                                                                                                                                                                                WPI; 1994-324521/40.
N-PSDB; AAQ72713.
                                                                                                                                                                                                                                                                                                                                                                                         28-JAN-1992;
21-FEB-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-OCT-1994
                                                                                                                                                                                Implantable device for inducing osteogenesis - comprises porous matrix contg. non-glycosylated dimeric, dissulphide linked osteogenic protein
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20-DEC-1991;
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90US-0059543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
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90US-00483913
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89US-00315342.
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                                                                                                                                                                                                                                                                                                                                                    CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
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/note= "MLE leader sequence"
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cc cavity, here it can induce local cartilage, bone and endochondrial bone cc formation; and it can also accelerate allograft repair. This implant has cc the advantage of inducing all stages of bone formation and of having a co higher specific activity than other known biosynthetic materials. The cc implant can be used to repair non-union fractures and cartilage; treat costeoarthritis; and aid in periodontal, dental or craniofacial cc reconstruction. (Updated on 01-UH-2002 to add missing PA field.)

CC (Updated on 25-MAR-2003 to correct pF field.) (Updated on 25-MAR-2003 to correct pR field.)

CC (Updated on 25-MAR-2003 to correct pF field.) (Updated on 25-MAR-2003 to correct pR field.)

CXX

SQ Sequence 484 AA;

Ouery Match
Best Local Similarity 100.0%; Score 111; DB 2; Length 484;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 INPETVPRYPCCAPTQLNAIS 20

1 INPETVPRYPCCAPTQLNAIS 458

Search completed: October 26, 2004, 07:50:46

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Result
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Maximum
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Perfect
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RESULT 2
US-08-335-583C-47
(US-08-335-583C-47)
; Sequence 47, Application US/08
; Patent No. 5693779
; GENERAL INFORMATION:
   APPLICANT: MOOS Jr., Malco
; APPLICANT: Mang, Shouwan
APPLICANT: Krinks, Marie
; TITLE OF INVENTION: PRODUC
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APPLICANT: Kyocera Corporation
APPLICANT: Nishimura, Yoshihiko
APPLICANT: Nishimura, Yoshihisa
APPLICANT: Tanihara, Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
CURRENT APPLICATION NUMBER: US/09/439,779B
CURRENT FILING DATE: 2001-09-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin version 3.1
SEQ ID NO 11
LENGTH: 20
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
FEATURE: VICTORIATION
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  PRODUCTION AND USE
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                                                                                                                                                                                                                                                                                                   Score 111; DB 4;
Pred. No. 1.1e-08;
Mismatches 0;
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ORIGINAL SOURCE: US-08-335-583C-47
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APPLICANT: H tten
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REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: NIH1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502
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HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: C-terminal
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PRIOR APPLICATION DATA:
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MEDIUM TYPE: Diskett
             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
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                                                                                                                                                         NUMBER OF SEQUENCES: 4
                                                                                                                                                                           NPPLICANT: Neidhardt, Helge
NPPLICANT: Paulista, Michael
PITLE OF INVENTION: NEW GROWTH/DIFFERENTIATING FACTOR OF
PITLE OF INVENTION: THE TGF- FAMILY
NUMBER OF SEQUENCES: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Knobbe, Martens, Olson and Bear STREET: 620 Newport Center Drive 16th Floor CITY: Newport Beach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM CONCERNING SYSTEM:
                                                                                           STREET: 650 CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 102 amino acids
TYPE: amino acids
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OPERATING SYSTEM:
                                                                         COUNTRY:
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                                                                                                                                         ADDRESSEE:
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                                                                                                                                                                                                                                                                                                       18,
                                                                                                                                                                                                                                                                                                                                                                                        57 INPETVPKPCCAPTQLNAIS 76
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                                                        TRY: U.S.A.
20005-5701
                                                                                                                                                                                                                                                                                                                                                                                                                     1 INPETVPKPCCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                        8, Application US/08288508C 5994094
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                                                                                                                          E: Nikaido, Marmelstein, Murray & Oram LLP 655 Fifteenth Street N.W. Suite 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
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compatible
PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (202)638-500
TELEFAX: (202)638-4810
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                               APPLICATION NUMBER: US/08/478
FILING DATE:
CLASSIFICATION: 530
ATTORNBY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 10-AUG-
FILING DATE: 10-AUG-
PRIOR APPLICATION DATA:
                                                                                                                                                                             ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FRAME PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                         REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRITELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 09-JUN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: DE P
FILING DATE: 25-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P
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                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINGLE-CHAIN ANALOGS OF TGF-B
TITLE OF INVENTION: SUPERFAMILY (MORPHONS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                      STATE: N
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ ADDRESSEE: THIBEAULT, LLP STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: JAHNS, Kristina M.
REGISTRATION NUMBER: P-4
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                                                                                                                                                                                                                                                                                                                                             CITY: BOSTON
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                 ELEPHONE:
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USA
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617-248-71
               617-248-7000
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US-08-289-222E-27
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APPLICANT: HOTTEN, GERTRUD
APPLICANT: HELGH
APPLICANT: BECHTOLD, ROLF
APPLICANT: POHL, JENS
INFORMATION FOR SEQ ID NO: 27: SEQUENCE CHARACTERISTICS: LENGTH: 102 amino acids
                                                                                      APPLICATION NUMBER: PCT/EP93/00350
FILING DATE: 12-FEB-1993
ATTORNEY/AGENT INFORMATION:
NAME: KITTS MONICA CHIN
REGISTRATION NUMBER: 36,105
REFERENCE/DOCKET NUMBER: 9564-9021
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/289,222
FILING DATE: 12-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P 44 23 190.3
FILING DATE: 07-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/01
FILING DATE: 25-AUG-1999
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
                                                                                                                                                                                                                 APPLICATION NUMBER: EPO 92102324.8 FILING DATE: .12-FEB-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                            FILING DATE: 07-JUL-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: NIKALDO, MARMELSTEIN,
STREET: 655 FIFTEENTH STREET, N.
STREET: SUITE 330
CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: GROWTH,
TITLE OF INVENTION: FAMILY
NUMBER OF SEQUENCES: 53
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LENGTH: 102 amino acids
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OTHER INFORMATION: /note= "OP-1 SEQUENCE"
                                                                        TELEPHONE:
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Pred. No. 5.5e-08;
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W., G STREET LOBBY,
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; MOLECULE TYPE: US-09-054-526B-27
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-289-222E-27
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US-09-054-526B-27
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COMPUTER: IBM PC. COMPARTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/054,526B
FILING DATE: 03-APR-1998
PRIOR APPLICATION NUMBER: US 08/289,222
FILING DATE: 12-AUG-1994
PRIOR APPLICATION NUMBER: US 08/289,222
FILING DATE: 12-AUG-1994
PRIOR APPLICATION NUMBER: DE P 44 23 190.3
FILING DATE: 01-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EPO 92102324.8
FILING DATE: 12-EBB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EPO 92102324.8
FILING DATE: 12-EBB-1992
PRIOR APPLICATION UNMBER: DE P 44 23 190.3
 Matches
               Query Match
Best Local S
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GENERAL INFORMATION:
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PCT/EP93/
FILING DATE: 12-FEB-1993
ATTORNEY/AGENT INFORMATION:
NAME: KITTS, MONICA CHIN
REGISTRATION NUMBER: 36,105
REFERENCE/DOCKET NUMBER: P564
                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 20005-5701
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 202/638-5000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: NIKAIDO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: DNA SEQUENCES ENCODING NOVEL TITLE OF INVENTION: GROWTH/DIFFERENTATION FACTORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 655 FIFTEENTH STREET, N. W., G STREET LOBBY, STREET: SUITE 330 CITY: WASHINGTON STATE:
                                                                                                         TOPOLOGY:
                                                                                                                          STRANDEDNESS
                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                           ENGTH:
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 1 Similarity
20; Conser
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BECHTOLD, ROLF
100.0%; llarity 100.0%; Conservative 0
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                 Score 111; DB 3; Pred. No. 5.5e-08;
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Pred. No. 5.5e-08;
 Mismatches
                                Length 102;
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 Indels
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 Gaps
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7733 FORSYTH BOULEVARD, SUITE 1400

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RESULT 7
US-08-931-858E-161
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                                                                                                                           Sequence 161, Applicat:
Patent No. 6232449
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 971486
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FORMATION
CORRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: DESAUVAGE, FRED
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTOR
WUMBER OF SEQUENCES: 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 77
CITY: ST.
STATE: MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                               TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTORS NUMBER OF SEQUENCES: 176
                                                                                                             APPLICANT: JOHNSON JR.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161, Application US/08931858E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
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                                                                                                                                                                                                                                             INPETVEKPCCAPTQLNAIS 76
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ADDRESSEE: HOWELL & HAFERKAMP, L.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MILBRANDT, JEFFREY D
KOTZBAUER, PAUL T
LAMPE, PATRICIA A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 amino acids
                                                                                                                                                                Application US/08981739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   314-727-5188
                                                                               MILBRANDT, JEFFREY D. KOTZBAUER, PAUL T.
                                                                                                                                                                                                                                                                                                                                                                                                                               single
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                                                                 PATRICIA A.
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                                                                                                                  EUGENE M.
                                                                                                                                                                                                                                                                                                                Score 111; DB 3;
Pred. No. 5.5e-08;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                              Length 102;
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TOPOLOGY: linear

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 161:
US-08-981-739-161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (314) 727-60: INFORMATION FOR SEQ ID NO: 161: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                        APPLICANT: CARLSON, APPLICANT: RUEGER, I APPLICANT: SAMPATH, TITLE OF INVENTION: TITLE OF INVENTION:
                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING PASSIFIC Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/981,739
FILING DATE: 31-Aug-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION UMBER: PCT/US97/03461
FILING DATE: <Unknown>
APPLICATION UMBER: PCT/US97/03461
FILING DATE: <Unknown>
ATTORNEY/ACENT INFORMATION:
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,
                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                         STREET: 45 SOUTH
APPLICATION NUMBER:
                                                                                                                                 COUNTRY: US
ZIP: 01748
                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 976
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314) 727-5188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: MISSOURI
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                                                                                                                                                                                                                45 SOUTH STREET
                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                    GRIFFITH, DIANA L
CARLSON, WILLIAM D
RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                SAMPATH, KUBER T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 3; llarity 100.0%; Pred. No. 5.5e-08; Conservative 0; Mismatches 0;
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  US/08/786,284A
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                                       Version #1.30
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CLASSIFICATION:

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                                       US-09-128-026-161
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US-09-128-026-161
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Best Local S
Matches 20
Query Match
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Patent No. 6403335
GENERAL INFORMATION:
                                                                                                                                                                                        APPLICATION NUMBER: US/09/128
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 9761
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 10707-5188
                                                                                                                                                        TELEFAX: (314) 727-609
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (508) 435-0992 INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                  ZIP: 63105-1817

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATEMIN RE-BASE #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                  MOLECULE TYPE:
                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: CR. TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: KOTZBAUER, PAUL
APPLICANT: LAMPE, PATRICIA
TITLE OF INVENTION: PERSEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: JOHNSON JR., EUGENE M
APPLICANT: MILBRANDT, JEFFREY D.
APPLICANT: KOTZBAUER, PAUL T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 1..102
OTHER INFORMATION: /product= "hOP-1"
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REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
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20; Conserv
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                                                                                                          amino acid
                                                                                                                       102 amino acids
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                                                                      linear
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linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESS:
                                                                                                                                                   4) /2
727-6092
70: 161:
                                                                                     single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 3;
100.0%; Pred. No. 5.5e-08;
tive 0; Mismatches 0;
 100.0%;
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                                                                                                                                                                                                                                 976163
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   Score 111;
 DB 4;
 Length 102;
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RESULT 12
US-09-220-616-161
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US-09-496-398-16
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APPLICANT: KECK, PETI
APPLICANT: SMART, JO:
TITLE OF INVENTION: 5
TITLE OF INVENTION: 5
NUMBER OF SEQUENCES:
Sequence 161, Application US/09220616 Patent No. 6645937 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 100.0%; Matches 20; Conservative 0;
                                                                                                                                                                                       Matches
                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16, Application US/09496398
                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617-248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/478,097
FILING DATE: 07-JUN-1995
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 617-248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
NAME: Z7,829
REGISTRATION NUMBER: Z7,829
REFERENCE/DOCKET NUMBER: STI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/496,398
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                       LOCATION: 1..102
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                  NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U:
ZIP: 02110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ ADDRESSEE: THIBEAULT, LLP
                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH:
                                                                                                                       57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57 INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                     l Similarity
20; Conserv
                                                                                                                       INPETVEKECCAPTQLNAIS 76
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                                                                                                                                                                                                                                                                                                                                                                                                         102 amino acids
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                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                       single
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JOHN
                                                                                                                                                                                                     100.0%; Score 111; DB 4; 100.0%; Pred. No. 5.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUPERFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SINGLE CHAIN ANALOGS OF TGF-B SUPERFAMILY (MORPHONS)
                                                                                                                                                                                                                                                                       /note= "OP-1 SEQUENCE"
                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STK-059CN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 5.5e-08;
; Mismatches 0;
                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version #1.25
                                                                                                                                                                                                                       Length 102;
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                                                                                                                                                                                       Indels
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                                                                                                                                                                                       Gaps
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Length

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APPLICANT: Stryker Corporation
TITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including TITLE OF INVENTION: Modified Morphogenic Proteins
FILE REFERENCE: STK-076
CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 199-08-16
NUMBER OF SEQ ID NOS: 90
SOFTWARE: Patentin version 2.0
SOFTWARE: Patentin version 2.0
                                                                                                                                                                                                                                                                          TOPOLOGY: linear;
; MOLECULE TYPE: peptide;
; SEQUENCE DESCRIPTION: SEQ ID NO: 161:
US-09-220-527-161
                                                                                                                                                                              Query Match
Best Local Similarity
Thehes 20; Conserve
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                                      RESULT 15
US-09-220-407-161
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GENERAL INFORMATION:
Sequence 161, Application US/09220407 Patent No. 6716600
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                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 161: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/981,739
FILING DATE: 31-Aug-1998
APPLICATION NUMBER: PCT/US97/03461
FILING DATE: «UNKNOWN»
ATTORNEY/AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/220,527
FILING DATE: 24-Dec-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAMPE, PATRICIA A.
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTORS
NUMBER OF SEQUENCES: 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 63105-1817
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 97
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314) 727-5188
TELEFAX: (314) 727-6092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                         57
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                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
CITY: ST. LOUIS
STATE: MISSOURI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 102 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: HOWELL & HAFERKAMP, L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09220527
                                                                                                                                                                                                  100.0%; Silarity 100.0%; For Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MILBRANDT, JEFFREY D. KOTZBAUER, PAUL T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOHNSON JR.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 4; 100.0%; Pred. No. 5.5e-08; o, Mismatches 0;
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                                                                                                                         76
                                                                                                                                                                                                                       Score 111; DB 4;
Pred. No. 5.5e-08;
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                                                                                                                                                                                                      Mismatches
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RESULT 13 US-09-374-958C-55

Sequence 55, Application US/09374958C Patent No. 6677432 GENERAL INFORMATION:

LENGTH: 102
TYPE: PRT
ORGANISM: Homo sapiens

OTHER INFORMATION: OP-1 9-374-958C-55

APPLICANT:

JOHNSON, EUGENE M

FEATURE:

B Ş

57 INPETVPKPCCAPTQLNAIS 76

US-09-220-616-161

STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: peptide

ENGTH:

amino acids

REFERENCE/DOCKET NUMBER: 97
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314) 727-5188
TELEFAX: (314) 727-5092
INFORMATION FOR SEQ ID NO: 161:
SEQUENCE CHARACTERISTICS:

ATTORNEY/AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,

ORMALL, DONALD R. 35,197 976163

FILING DATE:

PCT/US97/03461

FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/981,739
FILING DATE: 31-Aug-1998
APPLICATION NUMBER: PCT/US97/0346

COUNTRY: US
ZIP: 63105-1817
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE FORMS-DOS
COETTANEL BC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:

Version #1.30

APPLICATION NUMBER: US/09/220,616

TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTORS NUMBER OF SEQUENCES: 176
CORRESPONDENCE ADDRESS:

JOHNSON JR., EUGENE M MILBRANDT, JEFFREY D. KOTZBAUER, PAUL T. LAMPE, PATRICIA A.

EUGENE M.

ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
CITY: ST. LOUIS

MISSOURI

Matches Query Match Best Local

Similarity

100.0%; ilarity 100.0%; Conservative 0

0

Score 111; Pred. No. ! Mismatches

5.5e-08; DB 4;

Length 102;

0

Gaps

0

μ 20;

INPETVPKPCCAPTQLNAIS 20

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В
PRIOR APPLICATION NUMBER: US 08/288,508
PRIOR FILING DATE: 1994-08-10
PRIOR APPLICATION NUMBER: DE P 43 26 829.3
PRIOR FILING DATE: 1993-08-10
PRIOR APPLICATION NUMBER: DE P 44 18 222.8
PRIOR APPLICATION NUMBER: DE P 44 18 222.8
PRIOR FILING DATE: 1994-05-25
PRIOR PRIOR FILING DATE: 1994-05-05
PRIOR FILING DATE: 1994-06-09
NUMBER OF SEQ ID NOS: 41
                                                                                                                                                                                                                                                                                                                                                                                                RESULT 16
US-09-386-450D-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; MOLECULE TYPE: peptide US-09-220-407-161
                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Hotten, Gertrud
APPLICANT: Neidhardt, Helge
APPLICANT: Paulista, Michael
TITLE OF INVENTION: NEW GROWTH/DIFFERENTIATING FACTOR OF TGF-? Family
FILE REFERENCE: 100564-09022
                                                                                                                                                                                                                                                                                                                                                      Sequence 18, Application US/09386450D Patent No. 6764994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/386,450D CURRENT FILING DATE: 1999-08-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 161: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAMME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 9714
TELECOMMUNICATION INFORMATION:
TELEPHONE: 314-727-5188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/220,407
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/931,858
FILING DATE:
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ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: KLEIN, ROBERT
APPLICANT: DESAUVAGE, FRED
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH
NUMBER OF SEQUENCES: 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAMPE, PATRICIA A KLEIN, ROBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
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Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 102;
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RESULT 18
US-09-374-958C-69
; Sequence 69, Application US/09374958C
; Patent No. 6677432
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                                                                                                                                                                                                                                 ; MOLECULE TYPE: protein US-07-764-731B-8
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US-07-764-731B-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 18
LENGTH: 102
                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: PATENTIAL Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/764,731E
FILING DATE: 19319924
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI5159B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-076-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8, Application US/07764731B
                                                                                                                                                                                  Best Local
                                                                                                                                                                                                                                                                                                           TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Rosen, Vicki A.
APPLICANT: Wang, Elizabeth A.
APPLICANT: Wozney, John M.
TITLE OF INVENTION: Methods for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: DOMAIN
LOCATION: (1)..(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 6, Cambridge
                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                LENGIH:
                                                                                                   59 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57 INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20;
                                                                                                                                                                l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                      INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                : 104 amino acids
AMINO ACID
                                                                                                                                                                  100.0%; llarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                    linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods for Producing BMP-7 Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/07/764,731B
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                                                                                                                                                                  0
                                                                                                                                                                                  Score 111; DB 1;
Pred. No. 5.6e-08;
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Pred. No. 5 5e-08;
                                                                                                   78
                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #1.25
                                                                                                                                                                                                Length 104;
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                                                                                                                                                                    Indels
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SOFTWARE: PatentIn version 2.0
SEQ ID NO 69
LENGTH: 117
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
NAME/KEY:
LOCATION:
3-08-481-377-12
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CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 90
                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US94/
FILING DATE: 12-JAN-1994
ATTORNEY_AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., J
REGISTRATION NUMBER: 31,678
REFERENCE_POCKET NUMBER: PDS-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                     TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PPLICANT: Stryker Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Trypsin truncated H2223 mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 514
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: PCT/US94/00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including TTLE OF INVENTION: Modified Morphogenic Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1850 CITY: LOS ANGELES CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: JOHNS F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                  MOLECULE TYPE:
                                                                                IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                               CLONE: OP-1
                                                                                                                                                                                                                                       TELEPHONE:
                                                                                                                    OPOLOGY:
                                                                                                                                                                  ENGTH:
                                                                                                                                 YPE: amino acid
TRANDEDNESS: sir
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20; Conservative
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                                                                                                                                                                    118 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOHNS HOPKINS UNIVERSITY
JENTION: GROWTH DIFFERENTIATION FACTOR-3
              Protein
1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PatentIn Release #1.0, Version #1.25
                                                                                                                 linear
                                                                                                                                                                                                                                       (619) 455-5100
                                                                                                  protein
                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 4; 100.0%; Pred. No. 6.3e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/481,377
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US-08-491-835-10
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                                                                   US-09-153-733A-12
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Best Local S
Matches 20
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atent No. 5821056
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMER: PCT/U
FILING DATE: 12-CAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: 10-CAN-1904
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: FD TELECOMMUNICATION INFORMATION: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
NERAL INFORMATION APPLICANT: JOHNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                              IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Wetherell, Jr. Ph.D., REGISTRATION NUMBER: 31,678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/0 FILING DATE: 23-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                            COPOLOGY: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH:
                                No.
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                                                                                                                                       73 INPETVEKECCAPTOLNAIS 92
                                                                                                                                                                    1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                        20;
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                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
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                                                   Application US/09153733A
                                                                                                                                                                                                                                                                                                                                                                                                                                              118 amino acids
                                                                                                                                                                                                     100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                          Protein
1..118
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 JOHNS HOPKINS UNIVERSITY
                                                                                                                                                                                                                                                                                                                                                                                             linear
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E: Spensley Horn Jubas & Lubitz
1880 Century Park East, Suite 500
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                                                                                                                                                                                                                                                                                                           PCT/US94/00685
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Pred. No. 6.3e-08;
Score 111; DB 2;
Pred. No. 6.3e-08;
                                                                                                                                                                                                                                                                       John R
                                                                                                                                                                                                                                                                                                                                                                                    Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 118;
                      Length 118;
 0
Gaps
 0
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RESULT 22
US-08-946-092A-10
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Best Local Sim:
Matches 20;
                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                          sequence
                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM FORMATION
COMPUTER: IBM FORMATION
COMPUTER: PROBABLE
COMPOSITION
COMPUTER: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                               NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS: Spensley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein IMMEDIATE SOURCE: CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: WETHERELL, JR. Ph.D.,
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                     APPLICANT: THE JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                STREET: 1880 Century Park East, Suite 500 CITY: Los Angeles STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Protein LOCATION: 1..118
APPLICATION NUMBER: US/08/946,092A
                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/153,733A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
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5. 6030617
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29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 111; DB 3; 100.0%; Pred. No. 6.3e-08;
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RESULT 23
US-09-172-062-10
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION UMBER: US/08/491
APPLICATION NUMBER: US/08/491
PRIING DATE: 23-OCT-1995
APPLICATION NUMBER: PCT/US94/
PRILING DATE: 12-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr. Ph.D., J
REGISTRATION NUMBER: 913,678
REGISTRATION NUMBER: 913,678
REFERENCE/DOCKET NUMBER: 973
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: 1 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: 1i
MOLECULE TYPE:
IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/172,062
                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Wetherell, Jr. Ph.D.,
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Protein LOCATION: 1..118
                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
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6191
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E: OP-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : 118 amino acids amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09172062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Spensley Horn Jubas & Lubitz
1880 Century Park East, Suite 500
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                 Floppy disk
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                                                                                           FD3288
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Pred. No. 6.3e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     John R.
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Gaps

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/00666
FILING DATE: 12-JAN-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: FD279 PCT
REGERENCE/DOCKET NUMBER: FD279 PCT
TELEPAN: (619) 455-5100
TELEFAX: (619) 455-5100
INFORMATION FOR SEQ ID NO: 12:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Applicat GENERAL INFORMATION:
APPLICANT: JOHNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                   STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR CITY: LOS ANGELES STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                 COUNTRY: US
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                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/153,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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SEQUENCE DESCRIPTION: SEQ ID NO: 12:
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FILING DATE: 03-Sep-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application PC/TUS9400666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLONE: OP-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOHNS HOPKINS UNIVERSITY
IVENTION: GROWTH DIFFERENTIATION FACTOR-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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Pred. No. 6.3e-08;
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FILE REFERENCE: JHU1190-3
CURRENT APPLICATION NUMBER: US/09/301,520D
CURRENT FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR RELING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR PRIOR DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR FILING DATE: 1993-01-12
PRIOR FILING DATE: 1993-01-12
PRIOR FILING DATE: 1993-01-12
PRIOR FILING DATE: 1993-01-12

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73

INPETVPKPCCAPTQLNAIS 92

US-09-172-062-10

LOCATION: NAME/KEY: CLONE: OP-1

Protein 1..118

MOLECULE TYPE: protein IMMEDIATE SOURCE:

IOPOLOGY: STRANDEDNESS:

linear single

amino acid

118 amino acids

Matches Query Match

20;

Conservative

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Mismatches

1 INPETVEKECCAPTOLNAIS 20

Local

Similarity

100.0%; Score 111; DB 3; 100.0%; Pred. No. 6.3e-08;

Length 118;

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US-09-301-520D-10

Application US/09301520D

GENERAL INFORMATION: Sequence 10, App. Sequence 10, App. No. 636540

APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9 APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin

US-09-389-705-12

Sequence 12, Application US/09389705
Patent No. 6391565
Patent No. 6391565
Patent No. 6391565
Patent No. 6391565
Patent No. 6391665
APPLICANT: JOHNS HOPKINS UNIVERSITY
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3

Application US/09389705

NUMBER OF SEQUENCES: 29

ZIP: 90067 COMPUTER READABLE FORM:

COUNTRY: US

STATE: CALIFORNIA

ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR CITY: LOS ANGELES

RESULT 25

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73 INPETVEKECCAPTQLNAIS 92

1 INPETVEKECCAPTQLNAIS 20

Matches Query Match Best Local

20;

h 100.0%; Similarity 100.0%; 20; Conservative 0,

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Score 111; DB 3; Pred. No. 6.3e-08;

Length 118; Indels

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Gaps

; ORGANISM: Homo sapiens US-09-301-520D-10

SOFTWARE: PatentIn version 3.0 SEQ ID NO 10

ENGTH:

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Best Local S
Matches 20
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GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CT-US94-00685-10
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                                                                                                                                                                                                                                                                                                                           TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                            STRANDEDNESS: S
TOPOLOGY: linea
MOLECULE TYPE: pr
IMMEDIATE SOURCE:
CLONE: OP-1
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NAME: Wetherell, Jr. Ph. D.,
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 118 amino acids
TYPE: amino acid
                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: 1:
MOLECULE TYPE:
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                                                                                                                                               NAME/KEY: Protein LOCATION: 1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 12-JAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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20; Conserv
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Similarity 100.0%;
20; Conservative (
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: California
   INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                                                                                                                             amino acid
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                               INPETVPKPCCAPTQLNAIS 20
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1880 Century Park East, Suite 500
                                                              100.0%; Score 111; DB 5; llarity 100.0%; Pred. No. 6.3e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                              linear
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Pred. No. 6.3e-08;
); Mismatches 0;
                                                                                              Length 118;
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US-08-581-529B-12
                                                                                                                                                                                                                                                       RESULT 29
US-08-455-559-18
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                                                                                                                                                                                               Sequence 18, Application US/08455559
Patent No. 5801014
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (619) 678-5099
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNDEER: US/08/581,529B
FILING DATE: 15-APR-1996
                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                             APPLICANT: LEE, SE-JIN
APPLICANT: HUYNH, THANH
TITLE OF INVENTION: GROW
NUMBER OF SEQUENCES: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: """
CITY: La Jolla
CTATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                         ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COUNTRY. ""
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
LOCATION:
COUNTRY: US
ZIP: 90067
                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100.0%;
es 20; Conservative
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1..119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                               GROWTH DIFFERENTIATION FACTOR-5
                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 1; 100.0%; Pred. No. 6.4e-08;
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US-08-525-596B-22
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                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/089,670
FILING DATE: 09-JUL-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Liea A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REGISTRATION NUMBER: 38,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                         TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPOUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: 619-678-5070
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CLONE: OP-1
                                             TOPOLOGY: line MOLECULE TYPE: p IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: C
                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 03-Sep
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                                                                                           STRANDEDNESS:
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NAME/KEY: Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 119 amino acids
TYPE: amino acid
TOPOLOGY: linear
TOPOLOGY: linear
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                                                                                                             1: 119 amino acids amino acid
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5986058
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4225 Executive Square, Suite 1400
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                                                                             linear
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. 03-Sept-1993
ON: 435
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                                                                                               single
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Pred. No. 6.4e-08;
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RESULT 30 US-08-525-596B-22

Sequence 22, Application US/08525596B Patent No. 5827733

GENERAL INFORMATION:
APPLICANT: Huynh, Thanh
APPLICANT: Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32

ADURET: 422 STREET: 422 CITY: La Jolla STATE: CA STATE: CY

CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400

CIL.
STATE:
COUNTRY: US
COUNTRY: 92037

OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/5~
FILING DATE: 19-5~
CLASSIFF~~

PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07762
FILING DATE: 08-UUL-1994
ATTORNEY/AGENT INFORMATION:

NAME: Wetherell, Jr., Ph.D, REGISTRATION NUMBER: 31,678

US-08-455-559-18

NAME/KEY:

LOCATION:

Protein 1..119

INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 119 amino acids

TYPE: amino acid STRANDEDNESS: sir

TELECOMMUNICATION INFORMATION:

TELEPHONE:

619-455-5110

0

NAME: WETHERELL, JR. PH.D., JOHN R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: PD2280

MOLECULE TYPE:

linear protein single

CLONE: OP-1

FILING DATE: 31-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY/AGENT INFORMATION:
ANALYSIS ATTORNEY/AGENT INFORMATION:

SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:

US/08/455,559

APPLICATION NUMBER:

MEDIUM TYPE: Floppy

MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS

Matches Query Match

Local

Similarity

100.0%; Score 111; DB 1; 100.0%; Pred. No. 6.4e-08;

Length 119; Indels

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Conservative

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Mismatches

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; LOCATION: US-08-581-528A-12
RESULT 33
US-09-177-860A-22
; Sequence 22, Application US/09177860A
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US-09-097-616-12
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US-09-097-616-12
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                                                                                                                                                     Query Match
Best Local Similarity
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (619) 678-50 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                            TOPOLOGY: linea MOLECULE TYPE: pr IMMEDIATE SOURCE: CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CORENTING SYSTEM: PC-DOS/MS-DOS
COERRATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/097,616
                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Lisa A. Haile, Ph.D. REGISTRATION NUMBER: 38,347 REFERENCE/DOCKET NUMBER: 07
                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
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5. 6090563
                                                                             74 INPETVPKPCCAPTQLNAIS 93
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: California
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                                                                                                          INPETVPKPCCAPTQLNAIS 20
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4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                  (619) 678-5099
TD NO: 12:
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                                                                                                                                       100.0%; ilarity 100.0%; Conservative
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1..119
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                                                                                                                                                                                                                                                                                                                      single
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                                                                                                                                        Score 111; DB 3;
Pred. No. 6.4e-08;
; Mismatches 0;
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US-08-624-635-13
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                                                                                                                                                                                                Sequence 13, Application US
Patent No. 6204047
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
APPLICANT: Cunningham,
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No. 6096506
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 19-SEP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Huynh, Thanh
APPLICANT: Lee, Se-Jin
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR GROWTH DIFFERENTIATION FACTOR-8 AN
NUMBER OF SEQUENCES: 32
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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CLONE: OP-1
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REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: 858-677-1456
                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
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                                                                                                                                                               NUMBER OF SEQUENCES:
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LOCATION:
                                                                                                                                                                             PLICANT: Cunningham,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/177,860A FILING DATE: 23-OCT-1998
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                                                                                 CITY: Los Angeles
STATE: California
                                                                                                                  STREET:
                                                                  COUNTRY:
                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH:
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                                                     90067
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                                                                                                                                                                                                                                                                  Application US/08624635
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                                                                                                                  E: Spensley Horn Jubas & Lubitz
1880 Century Park East, Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              858-677-1465
                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protein
1..119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein
                                                                                                                                                                                  GROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 3; 100.0%; Pred. No. 6.4e-08;
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                                                                                                                                                                                                  No.
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DIFFERENTIATION FACTOR-10
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OPERATING SYSTEM: SOFTWARE: Patentl

Gaps

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TELEFAX: (619) 455-511
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION: 536

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/134,078

FILING DATE: 08-OCT-1993

ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., ph.D., John I
REGISTRATION NUMBER: 31,678

REFERENCE/DOCKET NUMBER: DD-3054

TELEPHONE: (619) 455-5100
  ATTICATION NUMBER: 08/003,144
PILING DATE: 12-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/05
TELECOMMUNITATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/45
FILING DATE: 31-MAY-1995
APPLICATION NUMBER: 08/01
                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 119 amino acids TYPE: amino acid STRANDEDNESS: single
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larity 100.0%;
Conservative 0
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1..119
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                                                                                                                                                                                                                    08/455,559
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                             07265/057001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 3;
Pred. No. 6.4e-08;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ., John R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version #1.25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Lee, Se-Jin
APPLICANT: Meherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8 NUCLEIC
TITLE OF INVENTION: ACID AND POLYPEPTIDES FROM AQUATIC SPECIES AND NON-HUMAN
TITLE OF INVENTION: TRANSGENIC AQUATIC SPECIES
FILE REFERENCE: JHUI120-9
CURRENT APPLICATION NUMBER: US/09/378,238
CURRENT FILING DATE: 1999-08-19
EARLIER FILING DATE: 1999-071
EARLIER FILING DATE: 1997-02-05
EARLIER FILING DATE: 1995-10-25
EARLIER APPLICATION NUMBER: 08/525,596
EARLIER APPLICATION NUMBER: PCT/US94/03019
EARLIER APPLICATION NUMBER: PCT/US94/03019
EARLIER APPLICATION NUMBER: 08/033,923
EARLIER FILING DATE: 1994-03-18
EARLIER APPLICATION NUMBER: 08/033,923
EARLIER FILING DATE: 1994-03-18
SACRIER FILING DATE: 1993-03-19

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US-09-378-238-26
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Best Local S
Matches 20
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                                                                                                                                                            Sequence 22, Application
Patent No. 6500664
GENERAL INFORMATION:
APPLICANT: Huynh,
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
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CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
                                                     NUMBER OF SEQUENCES: 32
                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ll Similarity
20; Conserva
                                                                                                                                                                                                                                                                                                                                                                                               74 INPETVPKPCCAPTQLNAIS 93
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                                                                                                                                                                                                                                                    Application US/09629938
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                                                                                                                                          Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 4;
100.0%; Pred. No. 6.4e-08;
tive 0; Mismatches 0;
                                                                                                                                                                     Thanh
                                                                                  ANTIBODIES SPECIFIC FOR GROWTH DIFFERENTIATION FACTOR-8 AND METHODS OF USING SAME (Amended)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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Pred. No. 6.4e-08;
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RESULT 35 US-09-145-060-18

Sequence 18, Applicat Patent No. 6245896 GENERAL INFORMATION:

ADDRECT:
STREET:
La Joj
CA

Jolla

COUNTRY: UZIP: 92037

USA

Gaps

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; NAME/KEY: ; LOCATION: US-08-624-635-13

MOLECULE TYPE: p

TOPOLOGY:

linear

CLONE: OP-1

Query Match Best Local : Matches

Local

. Similarity 20; Conserv

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US-09-629-938-22
                                                                                                                       CURRENT APPLICATION NUMBER: US/09/686,344
CURRENT FILING DATE: 2000-10-10
PRIOR APPLICATION NUMBER: 08/862,445
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/847,910
PRIOR TILING DATE: 1997-04-28
PRIOR FILING DATE: 1997-04-28
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR APPLICATION NUMBER: 08/795,596
PRIOR FILING DATE: 1995-10-26
PRIOR FILING DATE: 1995-10-26
PRIOR FILING DATE: 1995-10-26
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 40, Application US/09686344 Patent No. 6607884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local
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                       PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1993-C
NUMBER OF SEQ ID NOS: 51
                                                                                   PRIOR APPLICATION NUMBER: PCT PRIOR FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
ATTILLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 858-677-1465
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/629,938
FILING DATE: 01-Aug-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RATIONNAL, Ph.D. Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/075003
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Protein
LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 09/177,860 FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74
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20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCE CHARACTERISTICS:
LENGTH: 119 amino acids
TYPE: amino acid
          FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 4365 Executive Drive, Suite 1600 CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                               1993-03-19
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                                                                    08/033,923
                                                                                                           PCT/US94/03019
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Pred. No. 6.4e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: THE JOINS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
APPLICANT: LEE, Se-Jin
APPLICANT: HUYNH, Thanh
TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
FILE REFERENCE: JUHU1190-2
CURRENT APPLICATION NUMBER: US/09/412,791D
CURRENT FILING DATE: 1996-10-05
PRIOR APPLICATION NUMBER: US 08/581,528
PRIOR PILING DATE: 1996-01-09
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR FILING DATE: 1996-01-08
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 12, Application Patent No. 6713302
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local :
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Best Local Similarity
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Patent No. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 119
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 119
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: BC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/619,061

FILING DATE: 18-Jul-2000
CLASSIFICATION: <UNKnown>
                                                                                                                                                                                                                                                                                                                                 Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74
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                                                                                                                                                                                                                                CITY: La Jolla
STATE: California
                                                                                                                                                                                                               COUNTRY: USA
                                                                                                                                                                                                                                                                       STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09619061
                                                                                                                                                                                                                                                                                            ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09412791D
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100.0%; Pred. No. 6
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Pred. No. 6.4e-08;
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6.4e-08;
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RESULT 41
PCT-US94-00657-18
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                                                                   TELEFAX: 619-455-5110
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (619) 678-5
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: SE-UIN LL.
APPLICANT: HUYNH, THANH
THANH
GROWTH DIFFERENTIATION FACTOR-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
CITY: LOS ANGELES
                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. PH.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: F03256 CIF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/455-5100
                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                            CLASSIFICATION:
ATTORNEY/AGENT IN
                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
MOLECULE TYPE:
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FILING DATE: 15-JUN-1998
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/082001
TELEPHONE: (619) 678-5070
TELEPAX: (619) 678-5099
                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 1/12/9
                    STRANDEDNESS:
TOPOLOGY: li
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
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                                                       amino acid
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TYPE: amino acid
STRANDEDNESS: single
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                  linear
protein
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PCT-US94-07762-12
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Best Local Similarity 100.0%;
Matches 20; Conservative 0
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MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07762
FILING DATE: 08-JUL-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: TUMARKIN, LISA A., PH.D.
NAME: TUMARKIN, LISA A., PH.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 12, Application PC/TUS9407762
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
                                                                     Query Match 100
Best Local Similarity 100
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                      TELEFAX: (619) 455-511
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                       NAME: TUMARKIN, LISA A., PH.D. REGISTRATION NUMBER: P-38,347 REFERENCE/DOCKET NUMBER: FD2349 TELECOMMUNICATION: TOTAL TRANSPORTATION:
                                                                                                                                                                                                CLONE: OP-1
FEATURE:
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                                                                                                                                                                                                                                TOPOLOGY: line MOLECULE TYPE: p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
                                                                                                                                                         NAME/KEY: Protein LOCATION: 1..119
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74 INPETVPKPCCAPTQLNAIS 93
                                1 INPETVPKPCCAPTQLNAIS 20
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                                                                                      100.0%;
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Pred. No. 6.4e-08;
                                                                       Score 111; DB 5;
Pred. No. 6.4e-08;
); Mismatches 0;
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RESULT 43
PCT-US94-07799-12
| Sequence 12, Application PC/TUS9407799
| GENERAL INFORMATION:

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RESULT 44
US-07-718-274A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: TUMARKIN, LISA A., PH.D.
REGISTRATION NUMBER: P-38,347
REFERENCE/DOCKET NUMBER: FD-2348
TILECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEPHONE: (619) 455-5110
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                               Sequence 2
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: THE PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07799
FILING DATE: 08-JUL-1994
                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                         APPLICANT: Gitter, Thomas APPLICANT: Parsons, Thomas APPLICANT: Theofan, Georgia APPLICANT: Theofan, Georgenic Factor OF INVENTION: Osteogenic Factor 63
         ZIP: 60603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FROM PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-7 NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Protein LOCATION: 1..119
                                                                                                                                                                                                  ADDRESSEE:
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                                                                                                                                                                                                                   ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                   2, Application US/07718274A
5. 5284756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 INPETVPKPCCAPTQLNAIS 93
                                                                                                                        Chicago
: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                           Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Spensley Horn Jubas & Lubitz
1880 Century Park East, Suite 500
                                                                                                                                                                                Two First National Plaza, 20 South Clark
                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                              Marshall, O'Toole, Gerstein, Murray & Bicknell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 5; 100.0%; Pred. No. 6.4e-08; ... Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FD-2348
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RESULT 45
US-08-163-877-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 53996;,
Patent No. 53996;,
GENERAL INFORMATION:
GENERAL INFORMATION:
MCCOy, John
APPLICANT: McCoy, John
APPLICANT: McTray, Beth
APPLICANT: Wolfman, Neil
APPLICANT: Wolfman, Neil
APPLICANT: WOLFMANTS OF BONE MORPHOGENIC PROTEINS
                                                                                  MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/163,877
FILING DATE:
CLASSIFICATION: 435
CTASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Lazar, Steven R.
REGISTRATION UMBER: 32,618
REGISTRATION UMBER: GI 5219
TELEPHONE: 617 876-1170 x 8260
TELEPHONE: 617 876-1851
TELEPHONE: 617 876-9851
TELEPHONE: 617 876-9851
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Best Local Similarity
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APPLICATION NUMBER: US 07/415,555
FILING DATE: 04-OCT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/256,034
FILING DATE: 11-OCT-1988
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey 5.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 27129/9430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (312) 346-5750
TELEPAX: (312) 984-9740
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
                                                                     TELEFAX: 617 876-5851
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS
LENGTH: 139 amino acio
                                   SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (312) 346-5750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 19910
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ropology: linear
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5399677
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AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/07/718,274A
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RESULT 47
US-08-298-021-2
                                                                                                                                                                                         ; MOLECULE TYPE: protein US-08-149-106-2
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Best Local Similarity 100.
Whiches 20; Conservative
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                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/149,106
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/415,555
FILING DATE: 04-OCT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/256,034
FILING DATE: 11-OCT-1988
                                                                                                                                                                                                                                                                                 TELEFAX: (312) 984-9/40 TELEX: 25-3856 INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMA
APPLICANT: G
                                                                                                                                                                                                          TYPE: amino acids
TOPOLOGY: line
OLECUIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATER: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 27.
                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (312) 346-5750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IDDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94 INPETVPKPCCAPTQUNAIS 113
                                                                                                                               20;
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: Illinois
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                                                                 INPETVPKPCCAPTQLNAIS 113
                                                                                              INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Two First National Plaza, 20 South Clark
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Theofan, Georgia
VENTION: Osteogenic Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Parsons,
                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 1; 100.0%; Pred. No. 7.5e-08;
                                                                                                                                            100.0%; Score 111;
100.0%; Pred. No. 7.
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                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Version #1.25
                                                                                                                                              DB 1;
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                                                                                                                                                              Length 139;
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                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-298-021-2
                                                                                                                                                                 US-08-278-729A-5
                                                                                                                                Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2,
Patent No. !
                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
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                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPOUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0.
FILING DATE: 11-OCT-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 20-JUN-1991
PRIOR APPLICATION NUMBER: US 07/415,555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/149,106
FILING DATE: 11-0CT-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/718,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                   APPLICANT:
                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Sharp, Jeffrey S
REGISTRATION NUMBER: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LICANT: Parsons, Thomas F.
LICANT: Theofan, Georgia
LE OF INVENTION: Heterodimeric Osteogenic Factor
                                                                                                                      5, 55
565027F
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                                                                                                                                                                                                                             94 INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
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                                                                                                                                              Application US/08278729A
                                                                                                                                                                                                                                                                                                                                                                                                                       139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
 OPPERMANN, HERMAN OZKAYNAK, ENGIN KUBERASAMPATH, THAI RUEGER, DAVID C. PANG, ROY H.L. COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                         100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312/474-0448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-OCT-1989
                                                                                                 MHOL
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                                                   THANGAVEL
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                                                                                                                                                                                                                                                                                           Score 111; DB 1;
Pred. No. 7.5e-08;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                            Length 139;
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OTHER INFORMATION:
US-08-278-729A-5
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 49
US-08-155-343A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: KUBERA
APPLICANT: RUEGER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/278,729A FILING DATE: 20-7UL-1994 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: MORPHOGENIC PROTEIN SCREENING METHOD NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: PITCHER ESq., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
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                                                                                                                                                                                                                   UMBER OF SEQUENCES:
                                                                                                                                                                                                                                   TLE OF INVENTION:
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CITY: HOPKINTON
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                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Protein
LOCATION: 1..139
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                                                                                                     01748
                                                                                                                                                   HOPKINTON
 APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                      Application US/08155343A
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TANG, ROY H.L.
                                                                                                                                                                                                                                                                      PANG,
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                                                                                                                   USA
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                                                                                                                                                                                                                                                                                                    OPPERMANN, HERMAN
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                                                                                                                                                                                                                                                                                    CHARLES M.
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                                                                                                                                                                                                                    REGENERATION
33
                                                                                                                                                                                                                                                    MORPHOGENIC-INDUCED PERIODONTAL TISSUE
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Pred. No. 7.5e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 139;
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Best Local S
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                             APPLICATION NUMBER: US/08/406,6
FILING DATE: 20-MAR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 667,274
APPLICATION NUMBER: US 667,274
APPLICATION NUMBER: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: FENTON EGG., GILLIAN M.
REGISTRATION NUMBER: 3,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IEM PC COMPUTER: OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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REFERENCE/DOCKET NUMBER: CR
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN METABOLIC BONE DISEASES
                                                                                                                                                                                                                                                                                                                                                                                                     CITY: HOPKINTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 15-NO
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20; Conserv
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ROY H.L.
TREAT
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                  USA
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COHEN, CHARLES M
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linear
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LJ
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                                                                                                      US 667,274
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                                                                                                                                                        US 752,857
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US-08-643-563A-5
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Matches
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                                                                                                                                            TELEPHONE: (508) 435-90
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY ESQ., MICHAEL J.
REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRP-058CN2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                     SOPTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/643,563A
                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
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                                                               MOLECULE TYPE:
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nes 20; Conserv
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LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
LOCATION: 1..139
OTHER INFORMATION:
                                                                            LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.
                              NAME/KEY: Protein
                                                                                                                                                                                                                                                                                             CLASSIFICATION:
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STRANDEDNESS: sin
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OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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   /note= "HOP-1 (MATURE FORM)"
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Best Local S
Matches 20
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                           TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/643,7
FILING DATE: 06-MAY-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESq., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acid
                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
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NAME/KEY: Protein
1..139
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                                                                                                                                       LOCATION: 1..139
OTHER INFORMATION:
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                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: si
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94 INPETVPKPCCAPTQLNAIS 113
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                                                                           Similarity
                           INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COHEN, CHARLES M.
PANG, ROY H.L.
PANG, ROY H.L.
MORPHOGENIC-INDUCED PERIODONTAL TISSUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                               linear
                                                            Conservative
                                                                                                                                                                                                protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                         100.0%; Score 111; DB 1; 100.0%; Pred. No. 7.5e-08; tive 0; Mismatches 0;
                                                                                                                                       /note= "HOP-1 (MATURE FORM)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/643,763A
                                                                                                                                                                                                                                                                                                                                                         36,508
ER: CRP-067CN
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Pred. No. 7.5e-08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                          Length 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 139;
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                                                            Gaps
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; Sequence 5, Application US/08462623 ; Patent No. 5739107 ; GENERAL INFORMATION:

RESULT 53 US-08-462-623-5

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RESULT 54
US-08-451-953A-5
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                                                                                                                                                                        Patent No.
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                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                              APPLICANT: STAR.,
APPLICANT: OPPERMANN, HEROL.
APPLICANT: OZKAYNAK, ENGIN
TTANT: OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/462,623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
CORERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 01
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: MORPHOGEN TREATMENT
TITLE OF INVENTION: ULCERS.
NUMBER OF SEQUENCES: 33
                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Protein LOCATION: 1..139
                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
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                                                                                                                                                                                                                                                                               94
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                                                                                                                                                                                       Application US/08451953A
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                                                 KUBERASAMPATH, THANGAVEL RUEGER, DAVID C. PANG, ROY H.L.
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PANG, ROY H.L.
OZKAYNAK, ENGIN
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                                  COHEN,
                                                                                                                                                                                                                                                                                                                                                   Conservative
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RUEGER, DAVID C
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CHARLES M.
1; MORPHOGENIC PROTEIN SCREENING METHOD
1S: 33
                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 1; 100.0%; Pred. No. 7.5e-08; ive 0; Mismatches 0;
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                                                                                                                        HERMAN
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US-08-360-914B-10
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has 20;
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GENERAL INFORMATION:
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           APPLICATION NUMBER: US/08/360,914B
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/163,877
FILING DATE: December 7, 1993
                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                  APPLICANT: Neil M. WOLFMAN and John McCOY
TITLE OF INVENTION: MUTANTS OF BONE MORPHOGENIC PROTEINS
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein
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ADDRESSES: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                             ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 26-MA CLASSIFICATION: 43
                                                                                                                                                                                                                                                                             STREET: 87 Cambr
CITY: Cambridge
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linear
                                                                                                                                                                                                                                                                                                                   Genetics Institute,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
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Pred. No. 7.5e-08;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                   Inc - Legal Affairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 139;
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US-08-741-589A-10
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                                                                                                                                        ; MOLECULE TYPE: US-08-741-589A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Lazar, Steven R.
REGISTRATION NUMBER: 32,618
REFERENCE/DOCKET NUMBER: GI 5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617 498-8260
TELEPAX: 617 986-5851
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNBER: US 08/163,
FILING DATE: December 7, 1993
ATTORNEY/AGENT INFORMATION:
NAME: Lazar, Steven R.
REGISTRATION NUMBER: 32,618
REFERENCE/DOCKET NUMBER: GI 57
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617 498-8260
TELEFAX: 617 876-5851
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
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Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local Similarity
                                                                     Matches
                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/741,589A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Neil M. WOLTITLE OF INVENTION: MU NUMBER OF SEQUENCES: 1 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
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CITY: Cambridge
STATE: Massachus
                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                            TOPOLOGY:
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                                                                                    Similarity
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amino acid
                                                                                                                                                                                       : 139 amino acids
amino acid
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                                 INPETVPKPCCAPTQLNAIS 20
INPETVEKECCAPTQUAIS 113
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87 CambridgePark Drive
                                                                   100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
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                                                                                                                                                                            linear
                                                                                                                                                       protein
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ON: MUTANTS OF BONE MORPHOGENIC PROTEINS
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GENERAL INFORMATION:
APPLICANT: CHARET

COHEN, CHARLES M.

APPLICANT:

CHARETTE, MARC F.
KUBERASAMPATH, TH
RUEGER, DAVID C.

THANGAVEL

OF INVENTION:

MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS

OPPERMANN, HERMAN PANG, ROY H.L. OZKAYNAK, ENGIN SMART, JOHN E.

HERMANN

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; NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)" US-08-445-468A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 57
                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (617) 248-7560
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino ---
TYPE.
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Sequence 5, Application US/08461397A
Patent No. 5972884
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                                                                                                                                                                      Matches
                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/445,468A
FILING DATE: 22-MAY-1995
CLASSIFICATION: 514
ATTORNEY/ACENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: 36,508
REFERENCE/DOCKET NUMBER: TOP-072FW2
TELECOMMUNICATION INFORMATION:
                                     -08-461-397A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: KUBERA
APPLICANT: RUEGER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: MORPHOGEN-INDUCED LIVER REGENERATION NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: li
                                                                                                    94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                  100.0%;
                                                                                                                                                                      0
                                                                                                                                                                                  Score 111;
Pred. No. 7.
                                                                                                                                                                        Mismatches
                                                                                                                                                                      DB 2;
.5e-08;
s 0;
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                                                                                                                                                                                                    Length 139;
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Sequence 5, Ar.
Sequence 5, Ar.
Sequence 5, Ar.
Sequence 10. 5994131
Patent No. 5994131
APPLICANT: SMART, JOHN
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: RUEGER, DAVID C.
ANG, ROY H. L.
THOGENIC PRO
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US-08-912-088-5
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 617/248-7100 5:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IF Floppy disk
COMPUTER: DR PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/461,397A FILING DATE: 05-UN-1995 CLASSIFICATION: 514 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BICMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                     APPLICANT: COHEN, CF
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 139 amino acids TYPE: amino acid sTRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                           CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
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                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: HOPKINTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 100.0%; Score 111; DB 2; Length 139; l Similarity 100.0%; Pred. No. 7.5e-08; 20; Conservative 0; Mismatches 0; Indels
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                                                                                                                    01748
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CRP-074FW2
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COMPUTER REPLANT TYPE: Floppy disa MEDIUM TYPE: Floppy disa Computer: LBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFFWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION NDATA: APPLICATION NUMBER: US/08/278,730A FILLING DATE: 20-UULY-1994 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION: NAME: FENTON Esq., GILLIAN M. REGISTRATION NUMBER: 36,508 REFERENCE/DOCKET NUMBER: GRP-071FW TELEOMMUNICATION INFORMATION: TELEOMMUNICATION TAPORMATION: TELEOMMUNICATION TOR SEQ ID NO: 5:
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Best Local (
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INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/912,088
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/278,729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-(
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                     ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 3
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                                                                                                                                                                                                                                                                                                                                                                CITY:
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                STREET:
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5. 6022853
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                                                                                                                                                                                                                                                                                                                                                                                                  45 SOUTH STREET
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                                                                                                                                                                                                                                                                                                                                              USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KUBERASAMPATH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPPERMANN, HERMAN PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                  PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (508)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MORPHOGENIC-ENRICHED DIETARY COMPOSITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 2; 100.0%; Pred. No. 7.5e-08; tive 0; Mismatches 0;
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RESULT 61

APPLICANT:

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Gaps

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Matches

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US-08-278-730A-5
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,467
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/165,511
FILING DATE:
APPLICATION NUMBER: US/07/938,336
FILING DATE:
APPLICATION NUMBER: US/07/938,336
FILING DATE:
APPLICATION NUMBER: US/07/938,336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 111; DB 3; Best Local Similarity 100.0%; Pred. No. 7.5e-08;
                                                                                                      APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/753,059
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: CRP-059CP
REFERENCE/DOCKET NUMBER: CRP-059CP
TELEFAX: 617/248-7100
NFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC STREET: 35 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein FEATURE:
                                                                         REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MORPHOGEN-INDUCED MODULATION OF INVENTION: INFLAMMATORY RESPONSE NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Protein
LOCATION: 1.139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 35 SOUTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: single
                                                       TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20; Conservative
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COHEN, CHARLES M
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PANG, ROY HL
OPPERMANN, H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KUBERASAMPATH, THANGAVEL
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                                                           617/248-7000
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                                                                                                                                                                        ; TOPOLOGY: 1; MOLECULE TYPE: US-08-443-676-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Protein
LOCATION: 1.139
OTHER INFORMATION: /label= hOP1-MATURE
US-08-445-467-5
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US-08-443-676-1
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                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYPE: amino acid
                                                                                              Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6077988
GENERAL INFORMATION:
APPLICANT: KUBERASAMTTON:
APPLICANT: KUBERASAMTTON:
APPLICANT: KUBERASAMTTON:
APPLICANT
                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNUMBER: US/08/443,676
FILING DATE: 18-MAY-1995
CLASSIFICATION: 623
ATTORNEY/AGENT INFORMATION:
NAME: KELLEY, Robin D
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: STK-049DV
TELEPHONE: (617) 248-7100
TELEPAX: (617) 248-7100
TELEPAX: (617) 248-7100
TELEPAX: (617) 248-7100
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Best Local Similarity 100
Matches 20; Conservative
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CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: Homo sapier
TISSUE TYPE: HIPPOCAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: BERLOWIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 125 H
CITY: Boston
STATE: MA
                                                                                                                                                                                                         TYPE:
STRANDEDNESS:
Inear
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STRANDEDNESS: si
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Patent Administrator, Testa, Hurwitz
ADDRESSEE: Thibeault, LLP
                      94
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                                                                                                                  Similarity
                    INPETVPKPCCAPTQLNAIS 113
                                                         INPETVPKPCCAPTQLNAIS 20
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PE: HIPPOCAMPUS
                                                                                                  Conservative
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                                                                                              100.0%; Score 111; DB 3; 100.0%; Pred. No. 7.5e-08; ative 0; Mismatches 0;
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                                                                                                                                 Length 139;
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Gaps

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COUNTRY:

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US-08-480-515A-5
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                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                          Matches
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APPLICANT: KUBERA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/480,515A FILING DATE: 07.-UN-1995 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDICH TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                 APPLICANT: PANG, ROY H.L.
APPLICANT: OPPERMANN, HERMANN
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                              TITLE OF INVENTION: METHOD FOR MODULATING INFLAMMATORY TITLE OF INVENTION: RESPONSE.

NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 3
                                                                                    APPLICANT
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CTTY: HOPKINTON
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OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                                                                           Local
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No. 6194376
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20; Conservative
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                                                                                                                                                                                                    Application US/08414033A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES 45 SOUTH STREET
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                                                                             COHEN, CHARLES M.
                                                                                                                                                    KUBERASAMPATH, THANGAVEL
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Testa, Hurwitz & Thibeault
                ADDRESS:
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Pred. No. 7
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RESULT 65
US-08-271-556A-3
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TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: FENTON ESq., Gillian M. REGISTRATION NUMBER: 36,508 REFERENCE/DOCKET NUMBER: CRPTELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,033A
                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/271,556A
FILING DATE: 07-JUL-1994
                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
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                                                                                                                                                                                                                        STREET: 45 SOUT
CITY: HOPKINTON
STATE: MA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
                               CLASSIFICATION:
                                                                                                                                                                                           ZIP: 01748
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CITY: Boston
                                                                                                                                                                                                      COUNTRY:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                             ADDRESSEE:
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USA
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45 SOUTH STREET
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                                                                                                                                                                                                                                                                                   RUEGER, DAVIU
COHEN, CHARLES M
VENTION: 60A PROTEIN-INDUCED MORPHOGENESIS
POTENCES: 16
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                                                                                                                                                    Floppy disk
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 US 07/945,292
                                                                                                                                                                                                                                                                                                                                                                                  HERMANN
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7.5e-08;
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Gaps

15-SEP-1992

Floppy disk

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US-08-440-894A-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: line
MOLECULE TYPE: F
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/923,780
FILING DATE: 31-UUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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APPLICATION NUMBER: 1
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                                                                                                                  CORRESPONDENCE ADDRESS
 COMPUTER READABLE FORM:
                                                                                                                                  ITLE OF INVENTION: ITLE OF INVENTION: UMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION:
                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: HO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 36,508
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                                                                   CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                 ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                 COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                    94 INPETVPKPCCAPTQLNAIS 113
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USA
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                                                                                                                                                                                                                                                                                                                   Application US/08440894A
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COHEN, CHERLES M
ZENTION: METHOD FOR MODULATING INFLAMMATORY
ZENTION: RESPONSE
                                                                                                                                                                                                                                SMART, JOHN :
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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SMART, JOHN E
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E: HIPPOCAMPUS
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30-AUG-1991
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-170-936-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: :
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IR PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                        APPLICANT: PANG, ROY H.L.
APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: TREAFMENT TO PREVENT LOSS OF AND/OR
TITLE OF INVENTION: INCREASE BONE MASS IN METABOLIC BONE DISEASES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/01
FILING DATE: 15-MAY-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 2-MAY-1995
                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                  STATE: N
                                                                                                                                                                                                                                                                                   STREET: 45 SOUTH CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Protein LOCATION: 1.139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
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COMPUTER: II
                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LECOMMUNICATION INFORMATION:
                                                                                    CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ELEPHONE:
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FENTON Esq., GILLIAN M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (617)
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                                                   US 08/432,883
                                                                                                                    US/09/170,936
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Pred. No. 7.5e-08;
Mismatches 0;
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Length 139; Indels

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Gaps

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Matches

Local

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                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 51
SOPTMARE: FastSEQ for Windows Version 3.0
SEQ ID NO 46
LENGTH: 139
TYPE: PRT
ORGANISM: Human
US-08-868-452-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 68
US-08-868-452-46
                                                                                                                                                                                           RESULT 69
US-08-461-113-5
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Matches
                                                                                                                                                         Sequence 5, Application US/08461113 Patent No. 6399569
                                                                                                                                                                                                                                                                                                                       Matches
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Patent No. 6352972
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/08/868,452C CURRENT FILING DATE: 1997-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENERAL INFORMATION:
APPLICANT: Marcel E. Nimni
APPLICANT: Frederick L. Hall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PPLICANT: Bo Han
PPLICANT: Edwin Shors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ITLE OF INVENTION: BONE MORPHOGENETIC PROTEINS UTLE OF INVENTION: USE IN BONE GROWTH LE REFERENCE: 17972-11
                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-060CPFWC
                                                                                                                                                                                                                                                                                                                                      Local
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                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                          94
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20; Conserv
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                                                                          COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                       OPPERMANN, HERMANN PANG, ROY H.L. OZKAYNAK, ENGIN
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JOHN E.

HORPHOGEN TREATMENT FOR LIMITING
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Pred. No. 7.5e-08;
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Pred. No. 7.5e-08
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US-08-456-033-5
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Best Local Similarity
Matches 20; Conserv
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION: INFORMATION:
                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: PROLIFERATION OF EPITHELIAL CELLS: NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                      CITY: HOPKINTON STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single TOPOLOGY: linear
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                                                    COUNTRY:
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                                                                                                           45 SOUTH STREET
                                                                                                                                                                                                              PANG, ROY H.L.
COHEN, CHARLES M.
                                                                                                                                                                                                                                                 KUBERASAMPATH, THA OPPERMANN, HERMANN OZKAYNAK, ENGIN
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                                                     USA
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RUEGER, DAVID C.
RUEGER, DAVID C.
                                                                                                                                                                                                                              OZKAYNAK, ENGI
PANG, ROY H.L.
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                                                                                                                                                                                               MORPHOGEN-INDUCED
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Gaps

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Sequence 4, Application US/08643321
Patent No. 6498142
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/456,033
FILING DATE: 31-MAY-1995
CLASSIFICATION: $14
ATTORNEY/AGENT INFORMATION:
NAME: FENTON PS-
                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                            FILING DATE:
CLASSIFICATION: 514
ATTORNEY_AGENT INFORMATION:
NAME: TWOMEY, MICHAEL J
REGISTRATION NUMBER: 38,:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MORPHOGEN TREATMENT FOR CHRONIC TITLE OF INVENTION: RENAL FAILURE NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT, LLP STREET: 125 HIGH STREET
                                                                                                        REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRITELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
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LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
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Pred. No. 7.5e-08;
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SEQ ID NO 5
LENGTH: 139
                                                                                                                                                                                                                                                                            Patent No.
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Best Local Similarity 100
Matches 20; Conservative
                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: COHEN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 08/
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEC ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/464,206
CURRENT FILING DATE: 1999-12-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Oppermann, Hermann APPLICANT: Rueger, David C. RITLE OF INVENTION: Protein In
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                            APPLICANT: RUEGER, DAVID C.
TITLE OF INVENTION: PROTEIN-INDUCED TISSUE MORPHOGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
ORIGINAL SOURCE:
ORGANISM: Hom
                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                COUNTRY:
                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE TYPE:
                                              TY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  h 100.0%; Score 111; DB 4; Similarity 100.0%; Pred. No. 7.5e-08;
MA
USA
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                                                                                                                                                                                                                                                                                                Application US/08404113A
                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cohen, Charles M.
Kuberasampath, Thangavel
                                                                    E: Testa, Hurwitz & Thibeault
125 High St.
                                                                                                                                                                                                                  KUBERASAMPATH, THANGAVEL
                                                                                                                                                                                PANG, ROY H.L.
OPPERMANN, HEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
PE: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ON: Protein Induced Morphogenesis CBM-2 DIV (00960-502 DIV)
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                                                                                                                                                                                                                                        CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 4; 100.0%; Pred. No. 7.5e-08; tive 0; Mismatches 0;
                                                                                                                            23
                                                                                                                                                                                  HERMANN
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JS-08-456-033-5

TOPOLOGY: 1i

linear

protein

TELEFAX: (508) 435-6951 INFORMATION FOR SEQ ID NO:

TELEPHONE:

SEQUENCE CHARACTERISTICS:

0

LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single

Query Match Matches

Local

20;

Conservative

US-08-643-321-4

GENERAL INFORMATION:

APPLICANT:

COUNTRY: U ZIP: 02110

USA

BOSTON

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M

APPLICATION NUMBER:

TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

ENGTH:

amino acid

139 amino acids

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 74
US-09-882-875A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG, Gillian M.
REGISTRATION UNMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-05
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/09882875A Patent No. 6605117
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/404,113A FILING DATE: 14-MAR-1995 CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/882,875A
FILING DATE: 15-Jun-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 09/104,865
APPLICATION NUMBER: US 08/443,676
APPLICATION NUMBER: US 08/443,676
FILING DATE: 18-MAY-1995
APPLICATION NUMBER: US 07/529,852
FILING DATE: 29-MAY-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: KUBERASAMPATH, Thangavel
BERLOWITZ-TARRANT, Lawrence
TITLE OF INVENTION: SYNTHETIC BONE MATRIX
NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94 INPETVPKPCCAPTQLNAIS 113
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STATE: MA
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Thibeault, LLP
STREET: 125 High St.
                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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linear
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ER: CRP-052CP FWC
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Sequence 5, Application PC/TUS9201968
GENERAL INFORMATION:
APPLICANT: COHEN, CHARLES M
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: PANG, ROY HL
APPLICANT: PANG, ROY HL
APPLICANT: OPDERMANN, HERMANN
APPLICANT: RUEGER, DAVID C
TITLE OF INVENTION: PROTEIN-INDUCED M
NUMBER OF SEQUENCES: 23
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MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-882-875A-1
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PCT-US92-01968-5
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US-09-374-958C-68
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Stryker Corporation
APPLICANT: Stryker Corporation
TITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including
TITLE OF INVENTION: Modified Morphogenic Proteins
FILE REFERENCE: STK-076
CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
NUMBER OF SEQ ID NOS: 90
SOFTMARE: Patentin version 2.0
SEQ ID NO 68
LENGTH: 139
TYPE: PRT
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Mature H2223 mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens FEATURE:
                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA HUR
CITY: BOSTON
STATE: MA
COUNTRY: USA
                                                                 STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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REGISTRATION NUMBER: 39,061
REFERENCE/DOCKET NUMBER: STK-049CN2
                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 139 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                 Application PC/TUS9201968
                                                                 E: TESTA HURWITZ & THIBEAULT EXCHANGE PLACE 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 111; DB 4; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
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                                                                                                                                                  PROTEIN-INDUCED MORPHOGENESIS
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Pred. No. 7.5e-08;
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COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

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PCT-US92-01968-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CT-US93-07190-5
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 5, Application PC/TUS9307190 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 667,274
FILLING DATE: 11-MAR-1991
PRIOR APPLICATION UNMBER: US 752,764
FILLING DATE: 30-AUG-1991
APPLICATION NUMBER: US 752,764
FILLING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDWIND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-052)
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 617/248-7000
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                        SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07190
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: MO NUMBER OF SEQUENCES: 3 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
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DRIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        reacon 100.0%; Score 111; DB 5; Local Similarity 100.0%; Pred. No. 7.5e-08; les 20; Conservative n. Minnet
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                                 NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                       STREET: 35 SOUTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Protein LOCATION: 1..139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
TISSUE TYPE: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 139 amino acids
TYPE: AMINO ACID
STRANDEDNESS: single
                                                                                                                                                                                                                                                  COUNTRY: U
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
SECOMMUNICATION INFORMATION: FELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPOLOGY:
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                                                                                                                                                                                                                                                                                                                            35 SOUTH STREET
                                                                                                                                                                                                                                                                      USA
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                                                   34,637
                                     CRP-071
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TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
                                                                                                                                MOLECULE TYPE: F
ORIGINAL SOURCE:
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS LENGTH: 139 amino acid
                                     LOCATION: 1..139
OTHER INFORMATION:
                                                                          NAME/KEY: Protein
                                                                                                                 CISSUE TYPE:
                                                                                                                                                                                                          TRANDEDNESS:
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amino acid

linear

protein single

Homo sapiens E: HIPPOCAMPUS

/label= hOP1-MATURE

139 amino acids

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CRP-070

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RESULT 78
PCT-US93-07231-5
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Best Local Similarity 100
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                            Sequence 5, Applicati
GENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: ISM PC compatible
COMPUTER: ISM PC compatible
COMPUTER: ISM PC COMPATIBLE
COMPATION SYSTEM: PCT/US93/07231
APPLICATION NUMBER: PCT/US93/07231
FILING DATE: 1930729
CLASSIFICATION:
CLASSIFICATION:
                                                                                                                                                                                        NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
CREATIVE BIOMOLECULES, INC
STREET: 35 SOUTH STREET
CITY: HOPKINTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
                                                                                                                                                                        COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SSUE TYPE: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                               94 INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                                                                                                           Application PC/TUS9307231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        139 amino acids
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                                                                                                                                                                                                                                                                                                            MORPHOGEN-INDUCED NERVE REGENERATION AND
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Pred. No. 7.5e-08;
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Length 139;

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                                                            RESULT 80
PCT-US93-08808-5
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PCT-US93-08742-5
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                               Sequence 5, Application PC/TUS9308808 GENERAL INFORMATION:
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Best Local
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INFORMATION FOR SEQ ID NO:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATION SYSTEM: PCT-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08742
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: KELLEY ESQ, ROBIN D.
REGISTRATION NUMBER: 34,63
APPLICANT:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                        NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 45 SOUTH CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                          TISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                                                                                                                                               Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENGTH:
                                                                                                                                94
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                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                            100.0%;
Similarity 100.0%;
                                                                                                                                INPETVEKECCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                             amino acid
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E: HIPPOCAMPUS
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 MORPHOGEN-INDUCED LIVER REGENERATION
                                                                                                                                                                                                                                                                             /label= hOP1-MATURE
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                                                                                                                                                                                                                             Length 139;
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Best Local Similarity
Matches 20; Conserva
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                                                                                                                                                                                                                                                                           Sequence 5, Application PC/TUS9308885 GENERAL INFORMATION:
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TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: L
ORIGINAL SOURCE:
ORGANISM: Homo
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE
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LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: KELLEY ESQ, ROBIN:
REGISTRATION NUMBER: 34,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                              TITLE OF INVENTION: MO
TITLE OF INVENTION: UL
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7477
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                                                                                                                                    STREET: 45 GC CTTY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein LOCATION: 1.139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
TISSUE TYPE: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                 COUNTRY: U
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                    1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                   USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Sontive 0;
                                                                                                                                                                                                                                ULCERS
                                                                                                                                                                                                                                              MORPHOGEN TREATMENT OF GASTROINTESTINAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= hOP1-MATURE
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Pred. No. 7.5e-08;
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                    Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 5;
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LENGTH:

139 amino acids

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US-08-621-803-249
                                                                                                                                                                                                                                                                                                                       US-08-621-803-249
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Best Local Similarity 100.
".~ 20; Conservative
                                                                                     Sequence 2, Application US/09271970 Patent No. 6242219 GENERAL INFORMATION:
                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 249, App
Patent No. 58518
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
ETT.R REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 161 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/0
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: BOTUL, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Better, Marc D
TITLE OF INVENTION: Method
TITLE OF INVENTION: Fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 312/474-63
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                                                                                                                                                                                                                                                                                                                                                                                 161 amino acids
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265
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100.0%; Pred. No. 8.7e-08;
tive 0; Mismatches 0;
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Cower, 233
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Pred. No. 7.5e-08;
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South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #1.25
                                                                                                                                                                                                                                                                                      Length 161;
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94 INPETVPKPCCAPTQLNAIS 113

1 INPETVPKPCCAPTQLNAIS 20

PCT-US93-08885-5

LOCATION: 1,.139
OTHER INFORMATION: NAME/KEY: Protein

/label= hOP1-MATURE

TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

<u>ن</u>

ENGTH: TRANDEDNESS:

H: 139 amino acids amino acid

REFERENCE/DOCKET NUMBER: CR TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7477

REGISTRATION NUMBER: 34,637

ATTORNEY/AGENT INFORMATION PRIOR APPLICATION DATA: APPLICATION NUMBER:

KELLEY ESQ,

ROBIN D.

CRP-074

FILING DATE:

CLASSIFICATION: APPLICATION NUMBER:

PCT/US93/08885

MOLECULE TYPE: ORIGINAL SOURCE:

TOPOLOGY:

linear protein single

TISSUE TYPE:

Homo sapiens E: HIPPOCAMPUS

ORGANISM:

Matches Query Match Best Local :

20;

Conservative

0

Mismatches

0

0

Gaps

0,

Similarity

100.0%;

Score 111; DB 5; Pred. No. 7.5e-08

Length 139; Indels

PCT-US94-13181-10

Sequence 10, Applicat GENERAL INFORMATION:

Application PC/TUS9413181

NUMBER OF SEQUENCES: 1: CORRESPONDENCE ADDRESS:

ADDRESSEE:

E: Genetics Institute, 87 CambridgePark Drive

Inc - Legal Affairs

STREET: o, STREET: O, Cambridge

Massachusetts

02140

USA

APPLICANT: GENETICS INSTITUTE, INC.
TITLE OF INVENTION: MUTANTS OF BONE MORPHOGENIC PROTEINS

FILING DATE: December 7, 1993
ATTORNEY/AGENT INFORMATION:
NAME: Lazar, Steven R.
REGISTRATION NUMBER: 32,618
REFERENCE/DOCKET NUMBER: GI 5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617 498-8260
TELEPAX: 617 876-5851
INFORMATION FOR SEQ ID NO: 10:

5219-PCT

CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

US 08/163,877

FILING DATE APPLICATION NUMBER: COMPUTER READABLE FORM:
MEDIJM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:

PCT/US94/13181

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; LENGTH: 161
; TYPE: PRT
; ORGANISM: Human
US-09-271-970-2
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RESULT 86
US-09-760-397-2
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US-09-217-352-249
                                                                                                                                                                                             ; MOLECULE TYPE: protein US-09-217-352-249
                                                                                                                             Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 62/20 Patent No. 62/20 Patent No. 62/20 Patent No. 62/20 Patter
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Best Local
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CURRENT FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                        TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/621,803
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REGISTRATION NUMBER: 25,447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC-COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 6300
CITY: Chicago
STATE: Illinois
STATE: United States of America
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                                                                                                                                                                                                                                                                                                       TELEX:
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                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                                                                                                                                                                                         LENGTH:
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                                                               116 INPETVPKPCCAPTOLNAIS 135
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                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                             l Similarity
20; Conserv
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mino acid
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                                                                                                                             100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                               linear
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100.0%; Pred. No. 8
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                                                                                                                               Score 111; DB 3;
Pred. No. 8.7e-08;
D; Mismatches 0;
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. 8.7e-08;
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US-07-841-646-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Human US-09-760-397-2
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APPLICANT: Better, Marc D.
APPLICANT: Better, Marc D.
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
APPLICANTON: Improved Methods for Recombinant Peptide Production
TITLE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: U5/09/760,397
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
NUMBER OF SEQ ID NOS: 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 530

RIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
PRIOR APPLICATION NUMBER: US 660,162
                                                         PRILING DATE: 22-FEB-1991
PRIOR APPLICATION UDATA:
APPLICATION UNMBER: US 621
FILING DATE: 04-DEC-1990
PRIOR APPLICATION UNMBER: US 621
APPLICATION UNMBER: US 621
FILING DATE: 04-DEC-1990
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/841,646
FILING DATE: 19920221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                            FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 3
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STREET: SU
STREE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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RUBGER, OSTEC
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53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KUBERASAMPATH, T
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OSTEOGENIC DEVICES
                                                                                                                                                                                                                                  US 621,988
                                                                                                          US 621,849
US 616,374
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Pred. No. 8.7e-08;
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FILING DATE: PRIOR APPLICAT:

APPLICATION NUMBER:

APPLICATION DATA:

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21-NOV-1990 18-OCT-1990

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Gaps
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                                                                 ; TOPOLOGY: 1; MOLECULE TYPE: US-08-147-023-9
                                                                                                                INFORMATICS: 617/248-7000
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 169 amino -- Type:
 Best Loc
Matches
                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 621
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 616
FILING DATE: 21-NOV-1990
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APPLICATION NUMBER: US 60
FILING DATE:
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APPLICATION NUMBER: US 5'
FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 8: FILING DATE: 28-JAN-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                               FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 6:
FILING DATE: 04-DEC-1990
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 20-DEC-
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                   NAME: PITCHER, EDMU REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 3 FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 42 PRICTUR DATE: 17-OCT-1989
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                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATION DATA:
100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 9.1e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM PC compatible SYSTEM: PC-DOS/MS
                                                                                                                                                                                                                                                                                                                                                    NUMBER: US 232,630
15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-OCT-1990
                                                                                  protein
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                                                                                                                                                                                                                                                                   EDMUND
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                                 Length 169;
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Sequence 9, Age
1 Sequence 9, Age
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3 Sequence 9, Age
4 Sequence 9, Age
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5 Sequence 9, Age
6 Sequence 9, Age
7 Sequence 9, Age
7 Sequence 9, Age
8 Seq

Application US/08147023

APPLICANT: OPPERMANN, HERMANN APPLICANT: OZKAYNAK, ENGIN APPLICANT: KUBERASAWPATH, THA

OZKAYNAK, ENGIN KUBERASAMPATH, T RUEGER, DAVID C.

THANGAVEL

APPLICANT: TITLE OF IN

N: OSTEOGENIC DEVICES

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APPLICANT:

CORRESPONDENCE ADDRESS: APPLICANT: PANG, ROY TITLE OF INVENTION: NUMBER OF SEQUENCES:

STREET:

IDDRESSEE:

3: TESTA, HURWITZ & THIBEAULT S3 STATE STREET

MPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

COUNTRY:

MASSACHUSETTS: U.S.A.

02109

US-08-147-023-9

124 INPETVPKPCCAPTQLNAIS 143

1 INPETVPKPCCAPTQLNAIS 20

TOPOLOGY: 1i;
MOLECULE TYPE:
US-07-841-646-9

protein

TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:

LENGTH: 169 amino acids

NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000

CRP-001CP6

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FBB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:

FILING DATE: 22-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 483,913 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 569,920
FILING DATE: 20-AUG-1990 FILING DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 579,865

18-OCT-1990

US 599,543

APPLICATION NUMBER:

APPLICATION NUMBER: FILING DATE: 07-SE

07-SEP-1990

Query Match Best Local S Matches 20

Similarity

100.0%; Score 111; DB 1; 100.0%; Pred. No. 9.1e-08; tive 0; Mismatches 0;

Length 169;

0

20;

Conservative

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124 INPETVPKPCCAPTQLNAIS 143

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RESULT 89
US-08-447-570-9
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APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE: 07-SEP-
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APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: 1
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PRIOR APPLICATION DATA:
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                 APPLICATION NUMBER: US 3: FILING DATE: 23-FEB-1989
                                                                                                                            APPLICATION NUMBER: US 40 FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 60 FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                     APPLICATION NUMBER: US 422,613 FILING DATE: 17-OCT-1989
                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 20-AUG
                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 599,543 FILING DATE: 18-OCT-1990
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CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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RUEGER, L.
CNG, ROY H.L
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53 STATE STREET
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RUEGER, DAVID C.
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                    18-OCT-1990
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20-AUG-1990
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                                 US 315,342
                                                                                                                                           US 483,913
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                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660
FILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660
PRIOR APPLICATION NUMBER: US 660
PRIOR APPLICATION NUMBER: US 661
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TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
           FILING DATE: 04-DEC-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS LENGTH: 169 amino acid
                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 21-FEI CLASSIFICATION: 53
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REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
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53 STATE STREET
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ilarity 100.0%;
Conservative 0
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                    E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPPERMANN,
                                                 UMBER: US 621,988
04-DEC-1990
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04-DEC-1990
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ENGIN
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                 US 621,849
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                                                                                                                                                                            US 827,052
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; Pred. No. 9.1e-08;
0; Mismatches 0;
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RIOR APPLICATION DATA:

CON NUMBER:

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PPLICANT: PANG, ROY H.L.
ITLE OF INVENTION: ANTIBODIES TO OSTEOGENIC PROTEINS
JMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 169;
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US-09-148-925C-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 9, Applicatio Patent No. 6551995 GENERAL INFORMATION:
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
ELNGTH: 169 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/0
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: PITCHER, EDMUND REGISTRATION NUMBER: 2
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                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AL INFURFACE. OPPERMANN, HERMA
APPLICANT: OPPERMANN, HERMA
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124 INPETVPKPCCAPTQLNAIS 143
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20;
                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09148925C
                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 02110
                                                                                                     APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                 ILING DATE: 1-NOV-1993
PPLICATION NUMBER: US 07/841,646
ILING DATE: 21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      169 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KUBERASAMPATH, T
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 2; 100.0%; Pred. No. 9.1e-08;
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                 NUMBER: US 07/827,052
: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ROY H
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US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       THANGAVEL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 169;
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; MOLECULE TYPE: protein US-08-449-700-9

TELEFAX: 617/248-7100
[NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 169 amino acid

TYPE: amino acids
TOPOLOGY: linea

REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION, INFORMATION:

TELEPHONE:

617/248-7000

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 483,913 FILING DATE: 22-FEB-1990

APPLICATION NUMBER: US 4: FILING DATE: 17-OCT-1989

US 422,613

PRIOR APPLICATION DATA:

APPLICATION NUMBER: FILING DATE: 20-AUG

20-AUG-1990

US 569,920

FILING DATE: 23-FEB-

UMBER: US 315,342 23-FEB-1989

APPLICATION NUMBER:

US 232,630

FILING DATE: 15-AUG-1988 PRIOR APPLICATION DATA:

FILING DATE: 08-APR-1988 ATTORNEY/AGENT INFORMATION:

PITCHER, EDMUND

27,829

CRP-001CP6

APPLICATION NUMBER:

US 179,460

APPLICATION NUMBER: US 579,865 FILING DATE: 07-SEP-1990 PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: FILING DATE: 18-OC'

18-OCT-1990

US 599,543 US 600,024

Query Match 100.0%; Best Local Similarity 100.0%; Matches 20; Conservative 0

; Score 111; DB 2; ; Pred. No. 9.1e-08; 0; Mismatches 0;

US-08-449-699A-9

Sequence 9, Application US/08449699A

124 INPETVPKPCCAPTQUNAIS 143

INPETVPKPCCAPTQLNAIS 20

GENERAL INFORMATION:

KUBERASAMPATH, THE RUEGER, DAVID C. OZKAYNAK, ENGIN OPPERMANN, HERMANN

THANGAVEL

ent No.

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible

CORRESPONDENCE ADDRESS:

STREET: ADDRESSEE:

E: TESTA, HURWITZ 125 HIGH STREET

DUNTRY: TY: BOSTON

MASSACHUSETTS: U.S.A.

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RESULT 93
US-08-957-425-9
US-08-957-425-9
Equence 9, Application US/08957425
Patent No. 6586388
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: /PRODUCT="OP1A";
SEQUENCE DESCRIPTION: SEQ ID NO: 9:
US-09-148-925C-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELEPHONE: 617/248-7000
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                              PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                          124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 169 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
APPLICATION NUMBER: US 07/422,699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 0 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                             OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 4; Length 169; 100.0%; Pred. No. 9.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : 20-DEC-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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  RESULT 94
US-09-271-970-8
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                                                                                                                                                                           Query Match
Best Local S
Matches 20
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMIND R.
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                          124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-OAN-1992
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 661,62
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 661,988
FILING DATE: 23-FEB-1991
                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 07-SEP-1990
APPLICATION NUMBER: US 569,920
FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
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STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 600,024 FILING DATE: 18-OCT-1990
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APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 483,913
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                                                                                                                                                                              100.0%;
ilarity 100.0%;
Conservative C
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                                                                                                                                                                              Score 111; DB 4;
Pred. No. 9.1e-08;
0; Mismatches 0;
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                                                                                                                                                                                                                       Length 169;
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RESULT 96
US-08-621-803-257
Sequence 257, Application US/08621803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Human
US-09-760-397-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 95
US-09-760-397-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; SEQ ID NO 8
; LENGTH: 178
; TYPE: PRT
; ORGANISM: Human
; ORGANISM: Human
                                                                                                                                                                         ; Patent No. 5851802
; GENERAL INFORMATION:
; APPLICANT: Better, M
; TITLE OF INVENTION:
; TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: US/09/760,397
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTMARE: Patentin Ver. 2.0
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8, Application US/09760397 Patent No. 6500648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/271,970
CURRENT FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Better, Marc D.

APPLICANT: Gavit, Patrick D.

TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                    NUMBER OF SEQUENCES: 2: CORRESPONDENCE ADDRESS:
                                                     CITY: Chicago
STATE: Illinois
                                                                                              STREET:
                                     COUNTRY:
                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                    116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
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                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                      60606-6402
READABLE FORM
                                                                                            E: Marshall, O'Toole, 6300 Sears Tower, 233
                                       United States of America
                                                                                                                                                                                                              Better, Marc D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                    Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 3; 100.0%; Pred. No. 9.6e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 4; 100.0%; Pred. No. 9.6e-08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
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                                                                                            Gerstein, Murray & Borun
South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4; Length 178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
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                                       US-08-621-803-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 179 amin Type.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 20; Conserv
Query Match
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                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION NUMBER: US/08/621,803
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, Michael F;
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
TELECOMMUNICATION INFORMATION:
                                                                                                             TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 179 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Better, Marc D.
TITLE OF INVENTION: Method
TITLE OF INVENTION: Fusion
NUMBER OF SEQUENCES: 265
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY AGENT INFORMATION:
NAME: Borun, Michael F.
REGISTRATION NUMBER: 55,447
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/621,803
FILING DATE: 22-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                           MOLECULE TYPE:
                                                                                                                                                                       TELEPHONE: 312/4-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 6300 Second CITY: Chicago STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: United States of ZIP: 60606-6402
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TELEFAX: 312/474-0448
                                                                              TOPOLOGY:
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amino acid
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100.0%; Pred. No. 9.6e-08;
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Iower, 233
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South Wacker Drive
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US-09-217-352-261
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US-09-217-352-257
; Sequence 257, A
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                                                                                                                 Sequence 261, Application US/09217352
Patent No. 6274344
GENERAL INFORMATION:
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GENERAL INFORMATION:
APPLICANT: Better
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Matches
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 179 amino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/62
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: 312/474-6300
                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                            CORRESPONDENCE ADDRESS:
                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                        Local Similarity
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                              ADDRESSEE:
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20; Conservative 0;
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Chicago
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                E: Marshall, O'To 6300 Sears Tower,
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ilarity 100.0%;
Conservative (
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                                                                         Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
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                , O'Toole,
Tower, 233
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Tower, 233
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); Mismatches 0;
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Pred. No. 9.6e-08;
                Gerstein, Murray & Borun
South Wacker Drive
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South Wacker Drive
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US-09-271-970-14
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                                                              RESULT 101
US-09-760-397-14
                                                                                                                                                                                                                                                ; ORGANISM: Human US-09-271-970-14
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US-09-217-352-261
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Best Local Similarity
Matches 20; Conserv
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LENGTH: 190
                 GENERAL INFORMATION:
                                Sequence 14, App. Patent No. 65006
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Patent No. 624221
                                                                                                                                                                                                 Query Match
Best Local (
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CURRENT FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
    APPLICANT: Better, Marc
                                                                                                                                                                                                                                                                              TYPE: PRT
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APPLICATION NUMBER:
FILING DATE: 22-MAR-
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TYPE: a
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                           116 INPETVPKPCCAPTQLNAIS 135
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7: United States of America
                                                Application US/09760397
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Conservative C
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Pred. No. 1e-07;
Mismatches
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GENERAL INFORMATION:
APPLICANT: Better, Marc D.
APPLICANT: Getter, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041U501
FILE REFERENCE: 1103/11041U501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/217,352
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Pred. No. 9.6e-08;
Mismatches 0;
                                      DB 3;
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                                      Length 190;
Indels
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; LENGTH: 190
; TYPE: PRT
; ORGANISM: Human
US-09-760-397-14
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                                                                                                                                  ; MOLECULE TYPE:
US-08-621-803-255
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Best Local S
Matches 20
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SOFWARE: Patentin Ver. 2.0
SEQ ID NO 14
                                                                   Query Match
Best Local S
Matches 20
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Patent No. 58
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APPLICANT: Better, Marc D.
TITLE OF INVENTION: Method
TITLE OF INVENTION: Pusion
TITLE OF INVENTION: 765
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CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
                                                                                                                                                                                                                        TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/621,803
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                           NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27
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INPETVPKPCCAPTQLNAIS 135
                                  INPETVPKPCCAPTQLNAIS 20
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                                                                     Conservative
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                                                                                  100.0%;
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100.0%; Fred. No. 1e-07;
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                                                                                    Score 111; DB 2
Pred. No. 1e-07;
                                                                     Mismatches
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                                                                                                    Length 194;
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US-08-621-803-263 RESULT 104

Sequence 263, Application US/08621803 Patent No. 5851802

GENERAL INFORMATION:

APPLICANT: Better, TITLE OF INVENTION: TITLE OF INVENTION:

Marc D.

Methods for Recombinant Microbial Production
Fusion Proteins and BPI-Derived Peptides

O.H

NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:

STREET: 6300 : CITY: Chicago

6300 Sears Tower,

O'Toole,

Gerstein, Murray & Borun South Wacker Drive

Marshall,

ADDRESSEE:

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

60606-6402

COUNTRY: United States of America

Illinois

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25

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RESULT 103
US-09-217-352-255
                                                                                                                                              US-09-217-352-255
                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 255, Application US/09217352 Patent No. 6274344
                                                                       Matches
                                                                                                                                                                                                                                                                                    NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 2712
TELECOMPUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/6:
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Better, Marc D.
TITLE OF INVENTION: Method
TITLE OF INVENTION: Fusion
                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                 LENGTH:
116 INPETVPKPCCAPTQLNAIS 135
                                    1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RY: United 60606-6402
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                                                                                                                                                                                                                     194 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                        Conservative
                                                                                                                                                             protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        States of America
                                                                                      100.0%; Score 111; DB 3
100.0%; Pred. No. 1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
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                                                                                                           DB 3;
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                                                                                                       Length 194;
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Best Local S
Matches 20
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Query Match
Best Local Similarity
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SEQUENCE CHARACTERISTICS:
LENGTH: 195 amino acid
                                                                                               INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 195 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                          ATTORNEY AGENT INFORMATION:
NAME: BOTUM, Michael F.
REGISTRATION NUMBER: 25,447
                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Better,
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/6;
FILING DATE: 22-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TUMBER OF SEQUENCES:
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FILING DATE: 22-MAR-1996
FTORNEY/AGENT INFORMATION:
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REFERENCE/DOCKET NUMBER: 27129/33199
                                                                      TOPOLOGY:
                                                                                                                                                       TELEFAX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312/474-0448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    263, Application US/09217352
5. 6274344
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                                                                                amino acid
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: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Marshall, O'Toole, Gerstein, Murray & Borun
6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                        312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Better, Marc D
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100.0%;
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 Score 111; DB 3;
Pred. No. 1e-07;
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             Length 195
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US-07-841-646-11
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Patent No. 5266683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/07/841,64
FILING DATE: 1920221
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US
FILING DATE: 21-NOV-19
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: US
                                                                                              FILING DATE: 07-SEP-1990 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 5.
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                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 22-FEB-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 82/, USA
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                              PILING DATE: 20-AUG-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                FILING DATE: 18-OCT-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                FILING DATE: 18-OCT-PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 04-DEC
APPLICATION NUMBER:
                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MASSACHUSETTS: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: TESTA, HURWI
53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KUBERASAMPATH, TRUEGER, DAVID C.
                                                                                 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Floppy disk
                                                                                                                                                                                   18-OCT-1990
                                                                                                                                                                                                                                   18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-1990
                                                                                                                                                                                                                                                                                                                                 04-DEC-1990
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                                MBER: US 483,913
22-FEB-1990
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THANGAVEL
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US 422,613
                                                                                                                                                                                                   US 599,543
                                                                                                                                                                                                                                                   US 600,024
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                                                                                                 US 569,920
                                                                                                                                                 US 579,865
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                                                                                                                                                                                                                                                                                                   US 616,374
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Version #1.25
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FILING DATE: 23-FEB-PRIOR APPLICATION DATA:

23-FEB-1989

APPLICATION NUMBER: US 232,630

FILING DATE: 15-AUG-1988

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,460

FILING DATE: 08-APR-1988

ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829

REFERENCE/DOCKET NUMBER: CRP-001

TELECOMMUNICATION INFORMATION:

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TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-147-023-11
                                                                                                                                                                                                                                                          RESULT 108
US-08-447-570-11
                                                                                                                                                                        PATENT NO. 5714589
GENERAL INFORMATION:
APPLICANT: OPPERMAN
APPLICANT: OZKAYNAK
                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                            Sequence 11,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 6
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                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HU
                                                                                             NUMBER OF SEQUENCES:
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                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
COUNTRY:
                                                                                                           ICANT: RUEGER, DAVID ICANT: PANG, ROY H.L. E OF INVENTION: OSTEC
                                                                                                                                                                                                                                                                                                                           272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                         20;
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OZKAYNAK, ENGLT
KUBERASAMPATH, THA
TTGGER, DAVID C.
MASSACHUSETTS: U.S.A.
                                                                                                                                                                                                                                          Application US/08447570
                                           E: TESTA, HURWITZ & THIBEAULT
53 STATE STREET
                                                                                                                                                                                          OPPERMANN, HERMANN
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                                                                                                                                                            THANGAVEL
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                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 1;
Pred. No. 1.7e-07;
Nismatches 0;
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272 INPETVPKPCCAPTQLNAIS 291

INPETVPKPCCAPTQLNAIS 20

US-07-841-646-11

TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE CHARACTERISTICS: LENGTH: 317 amino acids TYPE: AMINO ACID

TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:

11:

CRP-001CP6

ELEPHONE:

Best Local Matches 2 Query Match

l Similarity 20; Conserv

100.0%; Score 111; DB 1; Length 317; ilarity 100.0%; Pred. No. 1.7e-07; Conservative 0; Mismatches 0; Indels

Gaps

0

RESULT 107 US-08-147-023-11

Patent No. 5468845 GENERAL INFORMATION:

OZKAYNAK,

ENGIN

HERMANN

KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.

RUEGER,

ROY H.L

OSTECGENIC DEVICES

Application US/08147023

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992

APPLICATION NUMBER: US/08/147,023 FILING DATE: 21-FEB-1992 CLASSIFICATION: 530

FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162

22-FEB-1991

PRIOR APPLICATION DATA:
APPLICATION NUMBER:

04-DEC-1990

US 621,988

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET

HURWITZ & THIBEAULT

COUNTRY:

MASSACHUSETTS: U.S.A.

02109

APPLICANT: PANG, R JUMBER OF SEQUENCES:

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US-08-447-570-11
Best Loca
Matches
                                      Query Match
                                                                                                                                                                                        TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
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FILING DATE: 21-FEB-1992
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 04-DEC-19
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 21-NOV-13
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 04 DEC1:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 599,543
FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acids
                                                                                                                                                                                                                                            REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                      FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 23-FEB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 422,613 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 483,913 FILING DATE: 22-FEB-1990
                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
1 Similarity 100 20; Conservative
                                                                                          TYPE: protein
                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                                      PITCHER,
                                                                                                                                                                                                                              617/248-7000
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04-DEC-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       UMBER: US 315,342
23-FEB-1989
                                                                                                                                                                                                                                                                                                                                          UMBER: US 179,460
08-APR-1988
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                100.0%;
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                  Score 111; DB 1;
Pred. No. 1.7e-07;
  Mismatches
                                    Length 317;
  Indels
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Gaps
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RESULT 109
US-08-449-700-11
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                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 20-DEC-1991

PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
INCOMER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 660,162
FILING DATE: 22-FEB-1991
PRIOR APPLICATION UNMER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION UNMER: US 621,849
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 600,024
FRICE APPLICATION DATA:
APPLICATION UNMER: US 600,024
FRICE APPLICATION DATA:
APPLICATION UNMER: US 600,024
                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 599
FILING DATE: 18-CCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579
FILING DATE: 07-SEP-1990
                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
PRILING DATE: 20-AUG-11:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: US
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                    FILING DATE: 17-OCT-
PRIOR APPLICATION DATA:
                                                                            FILING DATE: 22-FEB-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
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FILING DATE: 21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TLE OF INVENTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  272 INPETVPKPCCAPTQLNAIS 291
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MASSACHUSETTS: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KUBERASAMPATH, TRUEGER, DAVID C.
UMBER: US 315,342
23-FEB-1989
                                                                                                                                                                                                                                           UMBER: US 579,865
07-SEP-1990
                                                                                                                     JMBER: US 483,913
22-FEB-1990
                                                                                                                                                                                 JMBER: US 569,920
20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HURWITZ & THIBEAULT
                                                                               US 422,613
                                                                                                                                                                                                                                                                                                                       US 599,543
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Best Local Similarity 100.0%; Score 111; Matches 20; Conservative
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SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acids
                                                                                                                                                                                        FILING DATE: 24-MAY-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
          TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 1'
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: ISM FO-DOS/MS-DOS

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

ADDITION UNDEED. 17/08/4/8 500
                                                                                        NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 2
FILING DATE: 15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: ANTIBODIES TO OSTEOGENIC PROTEINS NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/449,699A
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RUEGER, UC.
NG, ROY H.L.
            317 amino acids
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125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KUBERASAMPATH, THE RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPPERMANN, HERMANN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRP-001CP6
                                                                                                                                      STK-001CP6CN
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US-09-148-925C-11
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             272 INPETVPKPCCAPTQLNAIS 291
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                                                                                             APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: MASSACHUSETTS
                                                        APPLICATION NUMBER: US
FILING DATE: 22-FEB-19
                                                                                                                                                                                              APPLICATION NUMBER: US 07/600,024
                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/621,988 FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/621,849 FILING DATE: 4-DEC-1990
                                    APPLICATION NUMBER
                                                                                                                                                                             FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09148925C
                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICATION NUMBER: US 07/841,646
"ILING DATE: 21-FEB-1992
PPLICATION NUMBER: US 07/827,052
"ILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRESSEE: TESTA, HURWITZ & THIBEAULT
REET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LING DATE: 1-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUBERASAMPATH, TI
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Pred. No. 1
                                                              0661
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                                    07/179,406
                                                                         07/483,913
07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
L.7e-07;
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GENERAL INFORM
APPLICANT:
APPLICANT:

OZKAYNAK,

INFORMATION:

CORRESPONDENCE ADDRESS

STREET:

BOSTON

MASSACHUSETTS

U.S.A.

02110

OPOLOGY:

amino acid Y: linear

ADDRESSEE:

APPLICANT:

-08-449-699A-11

equence 11,

tent No.

; TYPE: amino acid TOPOLOGY: linear ; MOLECULE TYPE: protein US-08-449-700-11

TELEPHONE:

617/248-7100

PITCHER, EDMUND

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RESULT 112
US-08-957-425-11
; Sequence 11, Application
; Patent No. 6586388
; Patent INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: /product="OP1B" SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
                 APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-EBB-1992 APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                                                                                             APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: CUNKNOWN>
{ APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                    CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 317 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                    COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/315,342 FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/08957425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/660,162
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ilarity 100.0%;
Conservative (
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RUEGER, DAVID C.
 NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                             HURWITZ & THIBEAULT
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                                                                                                                                                                                                                        Release #1.0,
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Pred. No. 1.7e-07;
0; Mismatches 0;
                                                                                                                                                                                                                        Version #1.25
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US-07-764-731B-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local 9
                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Rosen, Vicki A.
APPLICANT: Wang, Elizabeth A.
APPLICANT: Wozney, John M.
TITLE OF INVENTION: Methods for Producing BMP-7 Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                  ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 315,342

FILING DATE: 23-FEB-1989

APPLICATION NUMBER: US 212,630

FILING DATE: 15-AUG-1988

APPLICATION NUMBER: US 179,460

FILING DATE: 08-APR-1988

ATTORNEY/AGENT INFORMATION:

NAME: PITCHER, EDMIND R.
                                                                                                                                                                                    STREET:
                                                                                                                             COUNTRY:
                                                                                                                                                                   CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    272 INPETVPKPCCAPTQLNAIS 291
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TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 07-SEP-APPLICATION NUMBER: FILING DATE: 20-AUG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 621,849 FILING DATE: 04-DEC-1990 APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 4
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 18-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICATION NUMBER: US 599,543
                                                                                                                                                                                    E: Legal Affairs, Genetics Institute, Inc 87 CambridgePark Drive
                                                                                                                                 USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 4;
Pred. No. 1.7e-07
D; Mismatches 0
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US-07-841-646-15
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Tocal Similarity
                                                                                                                                                SOFTMARE: PATENTIAL PROPERTY OF SOFTMARE: PATENTIAR Release #1.0, Version #1.25 SOFTMARE: SOFTMARE: US/07/841,646 APPLICATION NUMBER: US/07/841,646 EILING DATE: 1992021 CLASSIFICATION BATA: APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 660,162 FILING DATE: 22-FEB-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 660,162 FILING DATE: 22-FEB-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 621,988 FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA: DATA: APPLICATION DATA: DATA: APPLICATION DATA: DATA: APPLICATION DATA: DATA
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INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: GI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: OS NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
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                                                                                                                                 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 53 STON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 19910 CLASSIFICATION: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                355 INPETVPKPCCAPTQLNAIS 374
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                                                                                                            CATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           I: 400 amino acids
AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02109
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ICATION DATA:
ION NUMBER: US 616,374
ATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3: TESTA, HURWI
53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 2.2e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U.S.A.
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPPERMANN, HERMANN
                                                                                     04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19910924
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HURWITZ & THIBEAULT
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                                                                                                          US 621,849
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US-08-147-023-15
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Patent No. 5
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Best Local Similarity
Matches 20; Conserv
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 315,342
                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
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PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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                                                                                                                                                                                                                                                           TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                                                                                                 COUNTRY:
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AMINO ACID
                                                                                               02109
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                                                                                                                 MASSACHUSETTS: U.S.A.
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RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, HERMANN
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07-SEP-1990
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Best Local
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FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579
FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
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REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acid
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APPLICATION NUMBER: 1
FILING DATE: 18-OCT-
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ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: 1
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APPLICATION NUMBER:
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APPLICATION NUMBER:
FILING DATE: 22-FEB-
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SOFTWARE: Patentin Release #1.0, Version #1.25
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                                                                               Similarity
                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                          PITCHER, EDMUND
 INPETVPKPCCAPTQLNAIS 382
                              INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                           408 amino acids
                                                                 Conservative
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                                                                                                                                            protein
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15-AUG-1988
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20-AUG-1990
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18-OCT-1990
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                                                                               100.0%; Score 111; 100.0%; Pred. No. 2
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                                                               Mismatches
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RESULT 116
US-08-447-570-15
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Sequence 15, App...
                                                                                                                                                                   PILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 569
FILING DATE: 20-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 483
                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US
FILING DATE: 18 -OCT-15
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 18 -OCT-15
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
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FILING DATE: 04-DEC-19
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 21-NOV-19
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FILING DATE: 04-DEC-
PRIOR APPLICATION DATA:
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FILING DATE: 20-DEC-
PRIOR APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                FILING DATE: 23-FEB-1989 PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                   FILING DATE: 17-OCT-
PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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                                                                   APPLICATION NUMBER:
APPLICATION NUMBER: US 232,630 FILING DATE: 15-AUG-1988
                                                                                                                    APPLICATION NUMBER:
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53 STATE STREET
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OZKAYNAK, ENGIN
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                                                                                                   UMBER: US 422,613
17-OCT-1989
                                                                                                                                                                                                       UMBER: US 569,920
20-AUG-1990
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22-FEB-1990
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04-DEC-1990
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21-NOV-1990
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28-JAN-1992
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                                                                    US 315,342
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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-447-570-15
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8 Sequence 15, App
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INFORMATION FOR SEQ ID NO: 15:
                                                                                                                                                                                                                                        SOFTWARE: PATENTIN Release #1.0, VeCURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/449,700
FILING DATE: 21-FEB-1992
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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LENGTH: 408 amino acid
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REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
                                                                                                                                      APPLICATION NUMBER: US 827,052
FILLING DATE: 28-JAN 1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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                                            PRIOR APPLICATION DATA:
                                                                                        PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                        APPLICATION NUMBER: FILING DATE: 04-DEC
                                                                                                          APPLICATION NUMBER: US 6:
FILING DATE: 04-DEC-1990
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   IOR AFFILC.... US B. APPLICATION NUMBER: US B. APPLICATION 21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363 INPETVPKPCCAPTQLNAIS 382
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RUEGER, DAVID C.
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08-APR-1988
                                                            04-DEC-1990
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                                                                                                                            US 621,988
                        US 616,374
                                                                            US 621,849
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US-08-449-699A-15
                                                                                                                                                                                                                                                                                      Patent No. 59557...
Patent No. 59557...
CORPERM
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Best Local Similarity
Matches 20; Conserv
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
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MOLECULE TYPE:
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APPLICATION NUMBER: US 4:
FILING DATE: 17-OCT-1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 3 FILING DATE: 23-FEB-1989 PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                     CORRESPONDENCE ADDRESS: ADDRESSEE: TESTA, HI
                                                                                                                                                                        NUMBER OF SEQUENCES: 33
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FILING DATE: 18-OCT
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                                                                                                                                   STREET:
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                                                                                 COUNTRY:
                                                                                                                                                 DDRESSEE:
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MASSACHUSETTS

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                                                                                                                                   125 HIGH STREET
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                                                                                                                                                                                                                                                      KUBERASAMPATH,
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20-AUG-1990
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                                                                                                                                                                                                                                   DAVID C.
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100.0%; Pred. No. 2.2e-07;
                                                                                                                                                   HURWITZ & THIBEAULT
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Length 408; Indels

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US-09-148-925C-15
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local Similarity
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REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
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                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                 ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
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                                                          APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
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                          FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: BOSTON
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ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 2; 100.0%; Pred. No. 2.2e-07;
                          NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROY H.L
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                                                                                                                                                                                                        RESULT 120
US-08-957-425-15
; Sequence 15, Application
; Sequence 15, Application
; Patent No. 6586388
; GENERAL INFORMATION:
; APPLICANT: OPPERN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 111; DB 4; Best Local Similarity 100.0%; Pred. No. 2.2e-07, Matches 20; Conservative 0; Mismatches 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS:
                                                                                  PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 17-CCT-1989
APPLICATION NUMBER: US OF FILING DATE: 17-CCT-1989
ATTORNEY/AGENT INFORMATION:
                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: /product="OP1D" SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 382
ADDRESSEE: TESTA, HURWITZ & THIBEAULT STREET: 53 STATE STREET CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 408 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                                                     Application US/08957425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 07/599,543
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/179,406
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FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/569,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/810,560
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                                                                                                                                                                                       OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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G DATE: 22-FBB-1991
                                                                                                                                             KUBERASAMPATH, TRUEGER, DAVID C.
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RESULT 121
US-07-841-646-2
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MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-08-957-425-15
Sequence 2, Application US/07841646
                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
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COMPUTER READABLE FORM:
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                                                                                           363
                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                            Similarity
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FILING DATE: 24-Oct-1997
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                         INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: MASSACHUSETTS COUNTRY: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: PITCHER,
                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                   FELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICATION NUMBER: US 600,024
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ING DATE: 28-JAN-1992
LICATION NUMBER: US 660,162
ING DATE: 22-FEB-1991
                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ING DATE: 17-OCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATION NUMBER: US 315,342
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                                                                                                                                                         100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.2e-07; tive 0; Mismatches 0;
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P-1990
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7-1990
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FILING DALL.

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 810,560

APPLICATION OF THE CONTROL OF THE 
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TITLE OF IN
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                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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PRIOR APPLICATION UMBER: US 422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
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                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
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APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 569,920
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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53 STATE STREET
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RUEGER, DAVID C.
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                                              08-APR-1988
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                                                                             US 179,460
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                                                                                                                                      TOPOLOGY: linear; MOLECULE TYPE: protein US-07-901-703-2
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US-07-901-703-2
                                                                      Matches
                                                                                    Query Match
Best Local
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Best Local Similarity 100.0%;
Matches 20; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: RUEGER, DAVID C
APPLICANT: RUEGER, DAVID C
APPLICANT: OPPERMANN, HERMANN
APPLICANT: OPPERMANN, HERMANN
APPLICANT: OZAKAYNAK, ENGIN
                                                                                                                                                                                                                                            TELEPHONE: 617/248-70
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                      NAME:
REGIFFRATION NUMBER: STK
REFERENCE/DOCKET NUMBER: STK
REFERENCE/DOCKET NUMBER: STK
TELECOMMUNICATION INFORMATION:
TOTTREPHONE: 617/248-7000
TOTTREPHONE: 700 NO: 2:
                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 199206
CLASSIFICATION: 438
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE:
386
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                                                                                      Similarity
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INPETVPKPCCAPTQLNAIS 405
                                 INPETVPKPCCAPTQLNAIS 20
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EXCHANGE PLACE,
                                                                      Conservative
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PLACE, 53 STATE STREET
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                                                                                   Score 111; DB 1;
Pred. No. 2.3e-07;
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                                                                                                   Length 431;
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RESULT 123

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RESULT 124
US-08-147-023-2
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TELEPHONE: (617) 876-1170 X4
TELEPAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Approx. No. 5468845
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
ZIF: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
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ATTORNBY/AGENT INFORMATION:
NAME: MCDANIELS, PATRICIA A.
REGISTRATION NUMBER: 33,194
REFERENCE/DOCKET NUMBER: GI
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, TI
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.
CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: GENETICS INSTITUTE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: RUEGER, DAVID APPLICANT: PANG, ROY H.L. TITLE OF INVENTION: OSTEC NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                        STREET: 53 ST
CITY: BOSTON
STATE: MASSAC
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Local Similarity 100.0%;
hes 20; Conservative 0
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CITY: CAMBRIDGE
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Pred. No. 2.3e-07
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                                                                                               Query Match
Best Local Similarity
                                                                                 Matches
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(INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 483,913
PILING DATE: 22-FEB-1990
PILING DATA: 700.617
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
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PRIOR APPLICATION NUMBER: US 621,849
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PRIOR APPLICATION DATE: US 810,560
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
PILING DATE: 15-AUC-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
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PRIOR APPLICATION DATA:

PRIOR APPLICATION NIMBER: US 827,052
                                                                                                                                                                    MOLECULE TYPE:
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APPLICATION NUMBER:
FILING DATE: 23-FEB-
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FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 5:
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                       NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
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                                                                                                                                                                                    TOPOLOGY:
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                386 INPETVPKPCCAPTQLNAIS 405
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)GY: linear
                                               INPETVEKECCAPTOLNAIS 20
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                                                                                 Conservative
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04-DEC-1990
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                                                                                 100.0%; Score 111; DB 1;
100.0%; Pred. No. 2.3e-07;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                          CRP-001CP6
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                                                                                                                Length 431;
                                                                                   Indels
                                                                                 0,
                                                                                 Gaps
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US-08-206-864-2
                                                                                                                                                    RESULT 126
US-08-278-729A-17
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                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserve
                                                                                                                                                                                                                                                                                                                                                         ; MOLECULE TYPE: protein US-08-206-864-2
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GENERAL INFORMATION:
                                                                                                                   Sequence 17,
Patent No. 5
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                                                                 GENERAL INFORMATION:
APPLICANT: SMART,
APPLICANT: OPPERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 04 MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 21-FEB-1992
ATTORNEY/AGENT INFORMATION:
NAME: DIFFCHE ENAMIN D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPBEATING SYSTEM: PC-DOS/MS-DOS
SOFTWARB: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/206,864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CR
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                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 431 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: PITCHER, EDMUND R
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: PATENT ADMINISTRATOR/CREATIVE BIOMOLECULES ADDRESSEE: INC. STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: US
ZIP: 01748
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                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                     7, Application US/08278729A
5650276
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INVENTION: METHODS AND COMPOSITIONS FOR INVENTION: RECOMBINANT OSTEOGENIC PROTEIN PRODUCTION
                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08206864
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                OPPERMANN, HERMAN
OZKAYNAK, ENGIN
KUBERASAMPATH, TH
RUEGER, DAVID C.
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JONES, WILLIAM K
TUCKER, RONALD F
                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                617/248-7100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPPERMANN, HERMANN
OZKAYNAK, ENGIN
RUEGER, DAVID PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 617/7000
                                                                                      . JOHN
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                                                                    HERMAN
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                                    THANGAVEL
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Length 431; Indels

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Gaps

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RESULT 127
US-08-480-528A-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (508) 435-6951 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
            SOFTWARE: PatentIn Release #1.0, V. CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,528A FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                      COUNTRY: USA
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acids
TYPE: amino acid
TOPOLOGY: line
HOLEGIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ., EDMUND R.
REGISTRATION UNMERR: 27,829
REFERENCE/DOCKET NUMBER: CRP-058CPFW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/278,729A FILING DATE: 20-0UL-1994 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: COHEN, C
ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                          STREET: 45 CTTY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 100.0%; Score 111; DB 1; Local Similarity 100.0%; Pred. No. 2.3e-07;
                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 45 SOUT
CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                    PLICANT: COHEN, CHARLES M.
TLE OF INVENTION: OP3-INDUCED MORPHOGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
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RUEGER, DAVID C.
PANG, ROY H.L.
COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
45 SOUTH STREET.
                                                                                                                                                                                                                                                                                                                                                                                                                                  OPPERMANN, HERMA
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17:
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                                                                                            Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 431;
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version, #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/8/479,666
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
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                                              Matches
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                                                                                                             US-08-479-666-4
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                                                           Best Local Similarity
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                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                     TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                  NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-076DV
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: OP3-INDUCED MORPHOGENESIS NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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CITY: I
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                                              20;
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1 INPETVPKPCCAPTQLNAIS 20
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45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KUBERASAMPATH, TH
RUEGER, DAVID C.
PANG, ROY H.L.
COHEN, CHARLES M.
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ilarity 100.0%;
Conservative C
                                                Conservative
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                                                             100.0%;
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                                                              Score 111; DB 1;
Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 111; DB 1;
Pred. No. 2.3e-07;
                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                             Length 431;
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Sequence 17

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RESULT 13:0
US-08-406-672-17
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CLASSIFICATION: 435
CLASSIFICATION: 4770RNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-06
TELECOMMUNICATION INFORMATION:
TOTRPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (617) 248-71 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/155,343A
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 45 SOUTH STREET CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TLE OF INVENTION: MORPHOGENIC-INDUCED PERIODONTAL TISSUE (TLE OF INVENTION: REGENERATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 15-NO.
                                                                       LICANT: KUBERASAMPATH, THANGAVEL
LICANT: COHEN, CHARLES M.
LICANT: OPPERMANN, HERMANN
LICANT: OPPERMANN, HERMANN
LICANT: RUEGER, DAVID C.
LICANT: PANG, ROY H.L.
LICANT: NEBERO, ROY H.L.
LICANT: PANG, ROY H.L.
LICANT: PANG, ROY H.L.
LICANT: PANG, ROY H.L.
LICANT: PANG, ROY H.D.
LICANT: OPPERMANN
LICANT: PANG, ROY H.D.
LICANT: OPPERMANN
LICANT: PANGANN
LICANT: PANGAN
                                                      ESPONDENCE ADDRESS
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1 Similarity 100.0%;
20; Conservation
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: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES 45 SOUTH STREET
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.3e-07;
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                                                                                                            BONE DISEASES
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               itent No.
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US 6.
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: U
FILING DATE: 30-AUG-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                           ADDRESSEE: PATE
STREET: 45 SOUTH
CITY: HOPKINTON
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les 20; Conservative
                            APPLICATION NUMBER: US/08/643,563A FILING DATE: 06-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLICANT: COHEN, CHARLES M.
TLE OF INVENTION: MORPHOGENIC PROTEIN SCREENING METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: FENTON ESQ., GILLIAN M. REGISTRATION NUMBER: 36,508 REFERENCE/DOCKET NUMBER: CRP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/0:
FILING DATE: 20-MAR-1995
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           CLASSIFICATION:
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amino acid
XGY: linear
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OZKAYNAK, ENGIN
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RUEGER, DAVID C.
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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Sequence 17,

Patent No.

PPLICANT:

Matches

Local

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RESULT 132
US-08-447-570-2
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Best Local S
Matches 20
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INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/447,5
FILING DATE: 21-FEB-1992
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR AFFICATION NUMBER: US 616,3/4
FILLING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
US 600,024
                                                       APPLICATION NOTE: 04-DEC-1990
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
CONTINUATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                   FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 8:
FILING DATE: 28-DAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
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CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
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                                                                                                                                                                                             PRIOR APPLICATION DATA:
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APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMVATH, THANGAVEL
APPLICANT: RUEGER, DAVID C.
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NAME: TWOMEY ESG., MICHAEL J.
REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRP-
                                                                                                                                                         APPLICATION NUMBER: US 6: FILING DATE: 04-DEC-1990
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                                                                                                                                                                                                                                   APPLICATION NUMBER:
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20; Conserv
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                                                                                                                                                                                                                 22-FEB-1991
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                                                                                                                     US 621,849
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TR: CRP-058CN2
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             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                   TITLE OF INVENTION: MOI TITLE OF INVENTION: REWNUMBER OF SEQUENCES: 3
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FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
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FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 18-OCT-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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APPLICATION NUMBER:
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                                                                           COUNTRY: U
ZIP: 01748
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REGISTRATION NUMBER: 27
REFERENCE/DOCKET NUMBER:
 SOFTWARE:
                                                                                                                                        STREET:
                                                                                                                                                      ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                          HOPKINTON
                                                                                                           MA
                                                                                                                                       E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
45 SOUTH STREET
                                                                                                                                                                                                                                                                                 RUEGER,
                                                                                              USA
PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                 COHEN, CHARLES
PANG, ROY H.L.
                                                                                                                                                                                                                                                                  OPPERMANN, HERMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; llarity 100.0%; Pred. No. 2 Conservative 0; Mismatche
                                                                                                                                                                                                                                                                              KUBERASAMPATH, TRUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UMBER: US 599,543
18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UMBER: US 422,613
17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MBER: US 569,920
20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-SEP-1990
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                                                                                                                                                                                                                                                  CHARLES M.
                                                                                                                                                                                                    REGENERATION
                                                                                                                                                                                                                    MORPHOGENIC-INDUCED PERIODONTAL TISSUE
                                                                                                                                                                                        (J)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; DB 1; Length 431; 2.3e-07;
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/643,763A
FILING DATE: 06-MAY-1996

FILING DATE: 00 CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: FENTON ESG., GILLIAN M.

REGISTRATION NUMBER: 36,508

REFERENCE/DOCKET NUMBER: CRP-067CN

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 248-7560

TELEPHONE: (617) 248-750

INFORMATION FOR SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:

LENGTH: 431 antito acids

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APPLICANT: SMART, JOHN E.
HITLE OF INVENTION: WORPHOGEN TREATMENT OF GASTROINTESTINAL ULCERS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 431;
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US-08-451-953A-17
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                                                                                                                                                             US-08-451-953A-17
                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:

ANDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PACENTIN Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/451,953A

FILING DATE: 26-MAY-1995

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

RAME: PITCHER ESG., EDMUND R.

REGISTRATION NUMBER: 27,829

REFERENCE/DOCKET NUMBER: CRP-058CN

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                  TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                 Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 100.0%; Score 111; DB 1; Local Similarity 100.0%; Pred. No. 2.3e-07; les 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                           ELEPHONE:
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  386 INPETVPKPCCAPTQLNAIS 405
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                                1 INPETVPKPCCAPTQLNAIS 20
                                                                                                     Similarity
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3Y: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COHEN; CHARLES M.

IVENTION: MORPHOGENIC PROTEIN SCREENING METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
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RUEGER, DAVID C.
PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPPERMANN, HERMI
OZKAYNAK, ENGIN
                                                                             100.0%; Score 111; DB 1; llarity 100.0%; Pred. No. 2.3e-07 Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                             (508) 435-9001
                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 431;
                                                                                                                      Length 431;
                                                                                  Gaps
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RESULT 134

Sequence 17, Ap Patent No. 5739

Application US/08462623

INFORMATION:

CHARETTE, MARC F.

APPLICANT:

PANG, ROY H.L. OZKAYNAK, ENGIN

OPPERMANN,

HERMANN

KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.

TELEPAX: (508) 435-6951
NFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids

ELECUME: (500)
TELEPHONE: (508)

(508) 435-9001

US-08-459-346-2 RESULT 136

Sequence 2, Application US/08459346 Patent No. 5834179 GENERAL INFORMATION:

NAME: FENTON ESG. GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRPTELECOMMUNICATION INFORMATION:

CRP-074CN

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

COUNTRY: U

ž

USA

SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:

US/08/462,623

APPLICATION NUMBER:

FILING DATE:

NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
CITY: HOPKINTON

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386 INPETVPKPCCAPTQLNAIS 405

1 INPETVPKPCCAPTQLNAIS 20

Matches Query Match

y Match 100.0%; Score 111; DB 1; Local Similarity 100.0%; Pred. No. 2.3e-07; hes 20; Conservative 0; Mismatches 0;

Indels

MOLECULE TYPE: protein

TYPE: amino acid TOPOLOGY: linear

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RESULT 137
US-08-445-468A-17
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                                                                                                                            Sequence 17, Application US/08445468A Patent No. 5849686
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                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein -08-459-346-2
                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 08-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 07
FILING DATE: 31-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/971,091
FILING DATE: 03-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
   TITLE OF INVENTION:
                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/029,335
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASANFATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
TITLE OF INVENTION: OF MATTER
NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin non-
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                                                                                                                                                                                                                                                                                                                                  Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                        386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                            th 100.0%; Score 111; DB 2; Similarity 100.0%; Pred. No. 2.3e-07; 20; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      M
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                                                                     KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.
                 OPPERMANN, HERMAN PANG, ROY H.L. COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
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TUCKER, RONALD F
RUEGER, DAVID C
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MORPHOGEN-INDUCED LIVER REGENERATION
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RESULT 138
US-08-901-200A-4
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                                                     COUNTRY: USA
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/901,200A
FILING DATE: 28-UUI-1997
CLASSIFICATION: 530
CCLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/08901200A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: OPPERM
APPLICANT: OZKAYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 17:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
PROTECTEDATION NUMBER: 36,989
                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA;
APPLICATION NUMBER: US/08/445,468A
FILING DATE: 22-MAY-1995
CLASSIFICATION: 514
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: COHEN, O
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
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                                                                                                                                                                                                                                                                   STREET: 45 SOUTH
CITY: HOPKINTON
STATE: MA
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                         KUBERASAMPATH, T
RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                                                                 COHEN, CHARLES M.
TENTION: OP3-INDUCED MORPHOGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                       PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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Pred. No. 2.3e-07;
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Best Local (
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                                                                Matches
                                                                            Query Match
Best Local (
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMA
                                                                                                                                                                                                                             TELEPHONE: (617) 248-7000
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                        NAME: MEYERS, Thomas C.
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKST NUMBER: CR.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08
FILING DATE: 02-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                              MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TLE OF INVENTION: Morphogenic Protein-Specific Cell TLE OF INVENTION: Surface Receptors and Uses Therefor
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                                                                                                                                                                 TOPOLOGY:
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 386 INPETVPKPCCAPTQUNAIS 405
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                                                            l Similarity
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SAMPATH, Kuber T.
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                                                            100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                 linear
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100.0%; Pred. No. 2.3e-07;
tive 0; Mismatches 0;
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                                                                                Score 111; DB 2;
Pred. No. 2.3e-07;
                                                                  Mismatches
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                                                                                                           APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 42
APPLICATION NUMBER: US 42
                                                              PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 62
FILING DATE:
                                                                                                                                                                                                                                                                               FILING LOCAL PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 21-NOV-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
                                                     PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 5' FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 18-OCT
                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                        APPLICATION NUMBER:
                                                                                                                                                                                     APPLICATION NUMBER:
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CATION NUMBER:

US 621,849

US 660,162

US 621,988

04-DEC-1990

US 616,374

18-OCT-1990

US 600,024

18-OCT-1990

US 599,543

20-AUG-1990

US 569,920

US 483,913

US 422,613

CATION DATA: ION NUMBER: US 179,460 ATE: 08-APR-1988

MBER: US 232,630 15-AUG-1988

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RESULT 140
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                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FOR POS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                         APPLICATION NUMBER: FILING DATE: 21-FE CLASSIFICATION: 53
                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
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                                                                                                                                                                                                                                                                                                      53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                 KUBERASAMPATH, TRUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                     TESTA, HURWITZ & THIBEAULT
28-JAN-1992
                                                                                                          21-FEB-1992
                                             20-DEC-1991
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US-07-989-847-6
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                                                                        Matches
                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 111; DB 2; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 6, Application US/07989847 Patent No. 5866364
                                                                                                                                                                                                                  TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
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                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: KAPINOS, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GITELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/989,847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: ISM PC compatible
COMPUTER: ISM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-DOS
COMPUTER: SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Israel, David APPLICANT: Wolfman, Neil M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
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                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                  TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION: 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: PITCHER, EDMUN REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 431 amino acids
386 INPETVPKPCCAPTQLNAIS 405
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Heterodimers, Compositions and Methods of Use
30
                                                                                        100.0%; Score 111; DB 2; 100.0%; Pred. No. 2.3e-07;
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27,829
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                                                                      Mismatches
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US-08-696-268B-4
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US-08-449-699A-2
                                                                                                                                                                                                                      Sequence 4, Application US/08696268B Patent No. 5968752 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/449,699A
FILING DATE: 24-MAY-1995
CLASSIFICATION #24
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/147,023
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: DITCHER ENMIND R
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
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APPLICANT: OPPERM
APPLICANT: OZKAYN
                                                                                                          APPLICANT: ICHIJO, HIDENORI
APPLICANT: NISHTOH, HIDEKI
APPLICANT: SAMPATH, KIDER T.
TITLE OF INVENTION: NOVEL SIGNALLING RECEPTOR FOR
TITLE OF INVENTION: MORPHOGENIC PROTEINS
NUMBER OF SEQUENCES: 8
                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Testa, Hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: PITCHER, EDMUND R. REGISTRATION NUMBER: 27,829 REFERENCE/DOCKET NUMBER: STITLECOMMUNICATION INFORMATION: 617/248-7000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: ANTIBODIES TO OSTEOGENIC PROTEINS NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
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STATE: N
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                                                     STREET:
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                                                                                                                                                                                                                                                                                                                                                                                         1 INPETVPKPCCAPTQLNAIS 20
                   Boston
: MA
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                                                       125 High St
 USA
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KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                        Hurwitz &
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:

ZIP: 02110 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk

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REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/461,397A
FILING DATE: 05-UUN-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R.
REGISTRATION NUMBER: 27,829
REGISTRATION UNUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-074FW2
TELECOMMUNICATION INFORMATION:
TELETAX: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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Best Local
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APPLICANT:
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING TITLE OF INVENTION: PROLIFERATION OF EPITHELIAL, CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                           STREET: 45 SOUT:
CITY: HOPKINTON
STATE: MA
                                                                                                                                                                                                                                                                                         COUNTRY: US
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
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5972884
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                                                                                                                                                                                                                                                                                                                                                          E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THA
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                          USA
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PANG, ROY H.L.
OZKAYNAK, ENGIN
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                                                                                                  Matches:
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386 INPETVPKPCCAPTQLNAIS 405

INPETVPKPCCAPTQLNAIS 20

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Gaps

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US-08-461-397A-17
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                                                                  MOLECULE TYPE: protein US-08-912-088-17
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                                    Query Match
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                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-0:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                              TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRD Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HILLE OF INVENTION: MORPHOGENIC PROTEIN SCREENING METHOD NUMBER OF SEQUENCES: 33
                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 45 SOUTH CITY: HOPKINTON STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                         LENGTH: 431 amino acids TYPE: amino acid TOPOLOGY: linear
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Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
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USA
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OZKAYNAK, ENGIN
KUBERASAMPATH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RUEGER, DAVID C. PANG, ROY H.L.
100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 2.3e-07 Conservative 0; Mismatches 0
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                                      Length 431;
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GENERAL INFORMATION:
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: COHEN, CHARLES M.
APPLICANT: RUEGER, DAVID C.
APPLICANT: RUEGER, DAVID C.
APPLICANT: PANG, ROY H.L.
APPLICANT: PANG, ROY H.L.
TITLE OF INVENTION: MORPHOGENIC-ENRICE
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 147
US-08-458-811-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-278-730A-17
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US-08-278-730A-17
                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/08458811 Patent No. 6027743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 111; DB 3; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                  NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                              APPLICANT: KHOURI, ROGER K.
APPLICANT: SAMPATH, KUBER T.
APPLICANT: RUGGER, DAVID C.
TITLE OF INVENTION: MANUPACTURE OF AUTOGENOUS REPLACEMENT
TITLE OF INVENTION: BODY PARTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY JAGENT INFORMATION:
NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: Floppy disk
COMPUTER: PM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/278,730A
FILING DATE: 20-UULY-1994
CLASSIFICATION: 435
CTARSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                              STREET: SOSTON
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MPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                      COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: HOPKINTON
                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386 INPETVPKPCCAPTQLNAIS 405
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                                                                                           MASSACHUSETTS
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                                                                                                                                       3: TESTA, HURWITZ & THIBEAULT 53 STATE STREET
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US-08-889-419-2
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Patent No. 6071708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 111; DB 3; Length 431; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0; Indels
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRI
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                CLASSIFICATION: 435
PRIOR APPLICATION UNDER: US 08/459,346
PILING DATE: 02-UN-1995
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRINT APPLICATION DATA:
APPLICATION NUMBER: US/08/889,419
FILING DATE: 08-JUL-1997
                                                                                                                                                                                                                                                                                            ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NNERAL INFORMATION:
APPLICANT: JONES, WILLIAM K
APPLICANT: TUCKER, RONALD F
APPLICANT: RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: KUBERAGAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
TITLE OF INVENTION: OF MATTER
NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Patent Administrator,
ADDRESSEE: Thibeault, LLP
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                  STATE:
                                                                                                                                                                                                                                                                                                                                                                                              STREET: 125 P
                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                            MA
USA
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                       CRP-081DVCN
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Query Match 100.0%; Score 111; Best Local Similarity 100.0%; Pred. No. Matches 20; Conservative 0; Mismatch
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                                          TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                          FILING DATE: 11-MAR-19
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: 30-AUG-12
FILING DATE: 30-AUG-12
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 1
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC
STREET: 35 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
 OLECULE TYPE:
                                                                                                                                    REGISTRATION NUMBER: 27 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/07/938,336
FILING DATE:
APPLICATION NUMBER: US 07/667,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U
    TYPE: amino acids
TOPOLOGY: 1:
                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/165,511 FILING DATE:
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                                                                                                                                                                                                               PPLICATION NUMBER:
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ER OF SEQUENCES:
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                                                                                                                                                                 PITCHER ESQ, EDMUND R
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SMART, JOHN E
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COHEN, CHARLES M
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protein
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                                                                                                                                                  27,829
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                                                               GENERAL INFORMATION:
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LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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6090776
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                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                             Application US/08459129
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45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                         431 amino acids
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OPPERMANN, H
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                                                                                                                                                                                                                                                                                                                              linear
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    DAVID C.
MANUFACTURE OF AUTOGENOUS REPLACEMENT
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Pred. No. :
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Query Match 100.0%; Score 111; DB 3; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: BC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,515A
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: FENTON BSG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-068FWC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORPHOGEN TREATMENT OF ORGAN TRANSPLANTS
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                                                     Length 431;
          Indels
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RESULT 152
US-09-219-391-4
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Best Local
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INFORMATION FOR SEQ ID NO: 2:
              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/219,391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,129
FILING DATE:
FILING DATE:
FILING DATE:
                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                            APPLICANT: COHEN, CHARLES M.
TITLE OF INVENTION: OP3-INDUCED MORPHOGENESIS
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                 STREET: 45 CONTINUE HOPKINTON
                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                   01748
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                                                                                                                                                   USA
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OZKAYNAK, ENGIN
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Pred. No. 2.3e-07;
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Best Local S
Matches 20
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RESULT 153
US-08-469-411-6
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                  Query Match
Best Local Similarity
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Patent No. 6190880
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                  NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI-5192B-CON
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-496-8622
TELEPHONE: 617-876-5851
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/901,200
PILLING DATE: 28-UUL-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
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MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING PATENTIN Release #1.0, Ve)
SOFTWARE: PATENTIN TROPERATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
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TYPE: amino acid
TOPOLOGY: linear
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                                                                                                     LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ARPLICANT: Israel, David
APPLICANT: Israel, David
Wolfman, Neil M.
TITLE OF INVENTION: Recombinant Bone Morphogenetic Protein
Heterodimers, Compositions and Methods of Use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Cambridge
Conservative
                  100.0%; Score 111; DB 3; 100.0%; Pred. No. 2.3e-07;
0;
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  Mismatches
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                                          Length 431;
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INPETVPKPCCAPTQLNAIS 20

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US-09-019-339B-2
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US-09-170-936-17
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                                                                                                                                                                   Patent No.
GENERAL I
                                                                                                                                                                                                Sequence 17,
                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                               IELEFAX: (212)596-9090
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: RUEGER, PAPPLICANT: TUCKER, PAPPLICANT: TUCKER, PAPPLICANTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAYE: James F. Haley, Jr.,
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (212)596-9000
                                                                                      APPLICANT:
                                                                                                     APPLICANT:
                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 1251 A. CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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CLASSIFICATION:
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                                                                                                                                                                                                                                                                                 386
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                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                            l Similarity
20; Conserv
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                                                                                                                                                                                                Application US/09170936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: James F. Haley, Jr., Esq. c/o FISH & NEAVE
1251 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       United States of America
PURGER, DAVID ...
PANG, ROY H.L.
SMART, JOHN E.
SMART, JOHN E.
TREATMENT TO PREVENT LOSS OF AND/OR
                                                                                                                                                                                                                                                                                                                                               100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (212)596-9090
OR SEQ ID NO: 2:
                                                                                  OPPERMANN, HERMA
OZKAYNAK, ENGIN
RUEGER, DAVID C.
                                                                                                                                  KUBERASAMPATH, THANGAVEL COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                            protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MATRIX-FREE OSTEOGENIC DEVICES, IMPLANTS AND METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       David C
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                                                                                                                     HERMANN
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Pred. No. 2.3e-07;
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Sequence 2, Application US/08402542 Patent No. 6395883

Patent No.

GENERAL INFORMATION:

APPLICANT:

RUEGER, DAVID C OPPERMANN, HERMA OZKAYNAK, ENGIN

HERMANN

WILLIAM K

NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS

23

ADDRESSEE: PATENT ADMINISTRATOR/CREATIVE BIOMOLECULES

STREET: 35 500 CTTY: HOPKINTON

ADDRESSEE:

3: INC. 35 SOUTH STREET

COUNTRY: US ZIP: 01748

USA

APPLICANT: KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
TITLE OF INVENTION: OF MATTER

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:

Version #1.25

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US-09-170-936-17
           RESULT 156
                                                                                                                 Query Match
Best Local Similarity
Matches 20; Conserv
-08-402-542-2
                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: INCREA-
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINI-
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/432,883
FILLING DATE: 2-MAY-1995
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION: INFORMATION:
                                                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U:
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                               NAME: FENTON ESq., GILLIAN M.
                                                                                                                                                                                                                                                                                                                 ELEPHONE:
                                                                                                                                                                                                                                                    ENGTH:
                                                            386 INPETVPKPCCAPTQLNAIS
                                                                                           1 INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                   amino acid
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                                                                                                                                                                                                                                                    431 amino acids
                                                                                                                                                                                                                                                                                                  (617) 248-75
(617) 248-7100
                                                                                                                           Conservative
                                                                                                                                                                                                                      linear
                                                                                                                                                                                                   protein
                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                    248-7560
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                                                                                                                                          Score 111;
Pred. No. :
                                                              405
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                                                                                                                                                         Length 431;
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APPLICATION NUMBER:

US/08/402,542

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/9
FILING DATE: 31-JUL-1992
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR.
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
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Sequence 17, App.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/029,335
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/971,091
FILING DATE: 03-NOV-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                            APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING
TITLE OF INVENTION: PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/938,336 FILING DATE: 08-AUG-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
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                                                                                                                                                                                           STREET: 45 CONTROL OF TTY: HOPKINTON
                  APPLICATION NUMBER: FILING DATE:
CLASSIFICATION: 514
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386 INPETVEKPCCAPTQLNAIS 405
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                                                                                                                                                                          USA
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CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                PANG, ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                   US/08/461,113
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Pred. No. 2.3e-07
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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-828-281B-5
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Best Local Similarity
Matches 20; Conserve
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US-08-828-281B-5
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Query Match
Best Local Similarity
Matches 20; Conserv
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APPLICANT: CHARET
APPLICANT: FINKLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                        TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                              NAME: FENTON, GILLIAN M
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/828,281B
                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                               CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS: CREATIVE BIOMOLECULES, INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T: 45 SOUTH STREET HOPKINTON
                                                                                                                   : 431 amino acids
amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHARETTE, Marc F.
FINKLESTEIN, Seth P.
FINKLESTEIN, Seth P.
VENTION: METHODS FOR ENHANCING FUNCTIONAL
VENTION: RECOVERY FOLLOWING CENTRAL NERVOUS SYSTEM ISCHEMIA OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 3; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Floppy disk
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                                                                                                                                                                                                            248-7000
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                100.0%; Score 111; DB 4;
100.0%; Pred No. 2.3e-07;
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 Mismatches
                                 Length 431;
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 Indels
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 0
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 Gaps
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INPETVEKECCAPTQLNAIS

20

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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-887-901-2
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US-09-887-901-2
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US-08-456-033-17
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                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                  Sequence 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (212)596-9090
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                 tent No.
                                                                       APPLICANT:
                                                                                                                           NERAL INFORMATION:
APPLICANT: RUEGER, DAVID C.
APPLICANT: THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/887,901
FILING DATE: 22-Jun-2001
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 09/019,339
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: James F. Haley, Jr., Esq.
REGERENCE/DOCKET NUMBER: CRP-147
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 10020
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: RUEGER, David C
TUCKER, Marjorie M
TITLE OF INVENTION: MATRIX-PREE OSTEOGENIC
METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
LE OF INVENTION:
LE OF INVENTION:
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                                                                                                                                                              INFORMATION:
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                                                                                                                                                                                   7, Application US/08456033
6495513
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: James F. Haley, Jr., Esq. STREET: 1251 Avenue of the Americas CITY: New York
                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: United States of America
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                          KUBERASAMPATH, THA
                                                                                          OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                      PANG, ROY H.L. COHEN, CHARLES
                                                       CHARLES M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (212)596-9000
                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                 MORPHOGEN-INDUCED NERVE REGENERATION AND REPAIR.
                                                                                                                                                                                                                                                                                                                                                                  0
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Pred. No. 2.3e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                     Length 431;
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APPLICATION NUMBER: US/08/643
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY, MICHAEL J
REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRPTELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FOC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

US/08/643,321

ADUM: STREET: IN BOSTON MA

125 HIGH STREET

HURWITZ & THIBEAULT, LLP

COUNTRY:

USA

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В
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                                                                                                                                                                     US-08-643-321-16
                                                                                                                            Sequence 16, Apr -- No. 6498142
                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                         Best
                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                    TELBEAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/456,033
FILING DATE: 31-MAY-1995
CLASSIFICATION: 514
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HU
                                                APPLICANT: SAMPATH, KUBER T.
APPLICANT: COHEN, CHARLES M.
TITLE OF INVENTION: MORPHOGEN TREATMENT FOR CHRONIC
TITLE OF INVENTION: RENAL FAILURE
                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 45 SOUTH
                                                                                                                                                                                                                                                                                                     Local Similarity
les 20; Conserv
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ZIP: 01748
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                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
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LECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                    1 INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                       H: 431 aminó acids
amino acid
OGY: linear
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                                                                                                                                                   Application US/08643321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                     Conservative
                                                                                 SAMPATH, KUBER T. COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (808)
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                                                                                                                                                                                                                                                                                                                       Score 111; DB 4;
Pred. No. 2.3e-07
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                                                                                                                                                                                                                                                                                                                                         Length 431;
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RESULT 163
US-09-148-925C-2
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US-08-938-622-2
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                                                                                                                       Matches
                                                                                                                                       Query Match
Best Local .
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Best Local
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Patent No. 6506729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                          TELEFAX: (617) 248-710 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7013
                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
REGISTRATION NUMBER: 36,989
                                                                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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                                                           386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
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                                                                                       1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                       (617) 248-7100
(77) TD NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPPERMANN, HERMANN
PANG, ROY H.L.
COHEN, CHARLES M.
COMPOSITIONS FOR THE
VERVION: METHODS AND COMPOSITIONS FOR THE
VERVION: TREATMENT AND PREVENTION OF PARKINSON'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431 amino acids
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                                                                                                                       Conservative
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, KUBER T.
                                                                                                                                  100.0%; Score 111; DB 4; Length 431; 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/938,622
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Pred. No. 2.3e-07;
; Mismatches 0;
                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                           #1.30
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Sequence 2, Application US/09148925C Patent No. 6551995
GENERAL INFORMATION:
                                                              APPLICATION NUMBER: US 07/422,623 FILING DATE: 17-OCT-1989 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, V.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS: ADDRESSEE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OPPERMANN, HERMANN
REFERENCE/DOCKET NUMBER: STK-001CP6C3
                                                                                                                                  APPLICATION NUMBER: US 0 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
                                                                                                                                                                                                    FILING DATE: 22-FEB-19:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 0 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MASSACHUSETTS
                                                                                                                                                                                                                            APPLICATION NUMBER: US 0
                                                                                                                                                                                                                                                                       FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.
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                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                         PPLICATION NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KUBERASAMPATH, TH
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROY H.L.
DN: OSTEOGENIC DEVICES
                                                                                                                                                                              17-OCT-1989
                                                                                                                                                                                                                                                                                                                     15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THANGAVEL
                                                                                                                                                        07/422,613
                                                                                                                                                                                                      07/422,699
                                                                                                                                                                                                                                               07/660,162
                                                                                                                                                                                                                                                                                             07/315,342
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OTHER INFORMATION: /Product="OP1-PP";
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-148-925C-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-957-425-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/08957425 Patent No. 6586388 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: OPPERMANN, HERMI
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 53 STATE STREET CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION DATA:
                                                                                    APPLICATION NUMBER: US 600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                        APPLICATION NUMBER: US 6
FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 827,052
                            APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                              FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 660,162
                                                 PPLICATION NUMBER: US 599,543
TLING DATE: 18-OCT-1990
                                                                                                                                                PPLICATION NUMBER: US 616,374
                                                                                                                                                                                      PPLICATION NUMBER: US 621,849
                                                                                                                                ILING DATE: 21-NOV-1
                                                                                                                                                                   LING DATE:
                                                                                                                                                                                                                                                LING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KUBERASAMPATH, THANGAVEL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.3e-07; tive 0; Mismatches 0;
                                                                                                                                                                     04-DEC-1990
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                                                                                                                                                                                                                           621,988
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TELEPHONE: 617-498-8622
TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO:
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US-08-957-425-2
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US-09-780-601A-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 111; DB 4; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
APPLICANT: Wolfman, Neil M.
TITLE OF INVENTION: Recombinant Bc
TITLE OF INVENTION: Heterodimers,
NUMBER OF SEQUENCES: 30
                                                                                                                                                                                                                                     ZIP: 02140-2387

COMPUTER READABLE FORM:

MEDIUM TYPE: Tape

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/780,601A
                                                               CLASSIFICATION:
PRIOR APPLICATION UMBER: US/08/469,411
PILLING DATE: 06-Jun-1995
ATTORNEY/AGENT INFORMATION:
NAME: Kaginos, Ellen J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 315,342
FILING DATE: 23-TEB-1989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 87 Camb
                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        386 INPETVPKPCCAPTQLNAIS 405
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APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Recombinant Bone Morphogenetic Protein Heterodimers, Compositions and Methods of
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GI-5192B-CON

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RESULT 167
US-09-374-958C-39
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INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TYPE: amino acid
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US-08-448-371A-10
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                                                                                                                                                                                                                                                      US-08-448-371A-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/448.3717
FILING DATE:
CLASSIFTTORT:
Sequence 39, Application US/09374958C Patent No. 6677432 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 20
                                                                                                                                                                                     Matches
                                                                                                                                                                                                                   Query Match
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                               NAME: MEYERS, Thomas C. 989 REGISTRATION NUMBER: 36,989 REFERENCE/DOCKET NUMBER: CRITELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SAMPATH, Kuber T.
TITLE OF INVENTION: Morphogenic Protein-Specific Cell
TITLE OF INVENTION: Surface Receptors and Uses Therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: TEN DIJKE, Peter
APPLICANT: HELDIN, Carl-Henrik
APPLICANT: MIYARONO, Kohei
APPLICANT: SAMPATH, Kuber T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 20; Conserv
                                                                                                                                                                                                   Local Similarity
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                                                                                                                 386 INPETVPKPCCAPTQLNAIS 405
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125 High St.
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(617) 248-7100 10:
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                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 4; Length 431; llarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                 Score 111; DB 4;
Pred. No. 2.3e-07;
                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                 Length 431;
                                                                                                                                                                                   Indels
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RESULT 169
US-08-937-755-2
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-672-224A-2
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PRIOR APPLICATION NUMBER: 60/156,261
PRIOR FILING DATE: 1999-09-27

NUMBER OF SEQ ID NOS: 14
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
TENCON**
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US-09-672-224A-2
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; OTHER INFORMATION: Morphogenic protein
US-09-374-958C-39
                                                                                                                                                                                                                 Sequence 2, Application US/08937755
Patent No. 6723698
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Stryker Corporation
TITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including
TITLE OF INVENTION: Modified Morphogenic Proteins
FILE REFERENCE: STK-076
CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
NUMBER OF SEQ ID NOS: 90
SOFTWARE: Patentin version 2.0
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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Best Local
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CURRENT APPLICATION NUMBER: US/09/672,224A
CURRENT FILING DATE: 2000-09-27
                                                 APPLICANT: PANG, ROY H.
APPLICANT: COHEN, CHARL
TITLE OF INVENTION: MET
TITLE OF INVENTION: TRE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: LEE, JOHN C.
APPLICANT: YEH, LEE-CHUAN C.
TITLE OF INVENTION: COMPOSITIONS AND THERAPPUTIC METHODS USING MORPHOGENIC TITLE OF INVENTION: PROTEINS, HORMONES AND HORMONE RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                APPLICANT:
                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
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                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
1 Similarity 100.0%;
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125 HIGH STREET
                                                                                                                                                            RUEGER, DAVID C.
SAMPATH, KUBER T.
OPPERMANN, HERMANN
                                                                                    COHEN, CHARLES M.

VENTION: METHODS AND COMPOSITIONS FOR THE

VENTION: TREATMENT OF MOTOR NEURON INJURY AND NEUROPATHY
                                                                                                                                             PANG, ROY H.L.
               PATENT ADMINISTRATOR, THIBEAULT, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 4;
Pred. No. 2.3e-07;
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Pred. No. 2.3e-07;
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                                 TESTA, HURWITZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 431;
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PCT-US90-07654-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 111; DB 4; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                     ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEFAX: 627/248-7100
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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TOPOLOGY: lim-
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/937,755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: OZKAYNAK, ENGIN
APPLICANT: OPPERMANN, HERMANN
APPLICANT: KUBERSAMPATH, THANGAVEL
APPLICANT: RUBCER, DAVID C
TITLE OF INVENTION: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRITELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7013
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CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CERRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS: ADDRESSEE: TESTA, HU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: BC
STATE: M
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 53 S'
CITY: BOSTON
                                                                                                                                                                     APPLICATION NUMBER: POFILING DATE: 19901228
CLASSIFICATION: 156
                                                                                                                                                                                                                                                                                                                                              COUNTRY: US
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   386 INPETVPKPCCAPTQLNAIS 405
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: MA
RY: USA
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APPLICANT: APPLICANT:

KUBERASAMPATH, THANGAVEL PANG, ROY HL OPPERMANN, HERMANN RUEGER, DAVID C

Application PC/TUS9201968

COHEN, CHARLES M

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PCT-US91-07635-2
RESULT 172
PCT-US92-01968-17
; Sequence 17, Applicati
; GENERAL INFORMATION:
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Best Local Similarity 100
Matches 20; Conservative
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                                                                                                                                                                     Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: OZKAYNAK, ENGIN
APPLICANT: RUBGER, DAVID C
APPLICANT: KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: P
FILING DATE: 19911018
CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                         ENGTH:
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                                                                                                   386 INPETVPKPCCAPTQLNAIS 405
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AMINO ACID
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3Y: linear
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53 STATE STREET
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                                                                                                                                                                     Conservative
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                                                                                                                                                                                     100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
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APPLICATION NUMBER: US 667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 752,764
APPLICATION NUMBER: US 752,764
APPLICATION AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: 27,829
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                                                                                                                                                                                                                                                                                                                                                                                                                                                -US93-05446-2
                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compartible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/05446
APPLICATION NUMBER: PCT/US93/05446
ATTORNEY/AGENT INFORMATION: NAME: PITCHER ESQ, EDMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
VFORMATION FOR SEQ ID NO: 17:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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TUMBER OF SEQUENCES:
                                       CLASSIFICATION:
                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                             CITY: Hopkinton
                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                             ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: POFILING DATE: 19920311
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                        USA
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                                                       19930608
ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                    PROSTHETIC DEVICES HAVING ENHANCED OSTEOGENIC PROPERTIES
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                                                              Matches
                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                          NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CR
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                          FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
PADDITORITY MIMBER: DCT/HEG1/0711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 19930 CLASSIFICATION:
                                                              Local Similarity
les 20; Conserv
                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U
ZIP: 01748
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TYPE: AMINO ACID
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
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386 INPETVPKPCCAPTQLNAIS 405
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                             1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                           amino acid
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35 SOUTH STREET
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                                                                Conservative
                                                                                                                                                               linear
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                                                                             Score 111; DB 5;
Pred. No. 2.3e-07;
                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                          Version #1.25
                                                                                          Length 431;
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RESULT 175 PCT-US93-07190-17

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PCT-US93-07231-17
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Best Local :
   COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07231
FILING DATE: 1930729
CLASSIFICATION:
ATTORNEY/ACENT INFORMATION:
NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-070
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELECOMMUNICATION INFORMATION:
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TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PATENTIN Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07190
ATTORNEY/AGENT INFORMATION:
NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                              CITY: HOPKINTON
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GY: linear
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                                                                              RESULT 178
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Best Local :
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                                 Sequence 17, Applicat GENERAL INFORMATION
                                                                                                                                                                                                                      Query Match
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TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: KELLEY ESQ, ROBIN D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA: APPLICATION NUMBER:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
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     MORPHOGEN-INDUCED LIVER REGENERATION
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INFORMATION FOR SEQ
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC
STREET: 45 SOUTH STREET
100.0%; Score 111; DB 5; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
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PCT-US93-08885-17
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; MOLECULE TYPE: protein
PCT-US93-08808-17
                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17, Application PC/TUS9308885
GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
               ATTORNEY/AGENT INFORMATION:
                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: MOI TITLE OF INVENTION: ULG NUMBER OF SEQUENCES: 3: CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-072
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
ATTORNEY/AGENT INFORMATION
NAME: KELLEY ESQ, ROBIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: PRIOR APPLICATION NUMBER:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08808
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                   STREET: 45
                                                                                  FILING DATE:
CLASSIFICATI
                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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KELLEY ESQ, ROBIN D
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                                                                                    CATION:
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617/248-7100
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                                                                                                              PCT/US93/08885
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Matches
                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
PRIOR APPLICATION NUMBER: US 07/753,059
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION NUMBER: US 07/923,780
ENTING DATE: 31-JUI-1992
DEFICATION NUMBER: US 07/923,780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4, Application:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -US93-10520-4
SEQUENCE CHARACTERISTICS:
                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/922,813
FILING DATE: 31-JUL-1992
ATTORNEY/AGENT INFORMATION:
                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (508)435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES,
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 45 CONTROL HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                 NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: PCT/US93/10520 FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        y Match 100.0%; Score 111; DB 5; Local Similarity 100.0%; Pred. No. 2.3e-07; nes 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: US
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                      4.
                                                                                    CRP-076PC
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Matches

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RESULT 181
PCT-US95-05467-10
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                                                                                                                                                    RESULT 182
                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
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Best Local (
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                               Sequence 2, Application PC/TUS9506724 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEFAX: (617)
                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (617) 248-700
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein
                  APPLICANT:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/05467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR,
ADDRESSEE: THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: MA
STATE: MA
USA
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CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
 ADDRESSEE:
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                                                                                                                                                                                                    386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                       : 431 amino acids amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                            linear
PATENT ADMINISTRATOR, TESTA, HURWITZ &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MORPHOGENIC PROTEIN-SPECIFIC CELL
SURFACE RECEPTORS AND USES THEREFOR
                                                                                                                                                                                                                                                                                       100.0%;
                                                  MANUFACTURE OF AUTOGENOUS REPLACEMENT BODY PARTS
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Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TESTA, HURWITZ &
                                                                                                                                                                                                                                                                                                             DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 431;
                                                                                                                                                                                                                                                                                                         Length 431;
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US-08-411-607A-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 3, Apprin
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 5994102
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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Best Local
                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ILM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/411,607A
FILING DATE: 11-APR-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
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CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                           APPLICANT: HE, WEI WU
TITLE OF INVENTION: PROSTATIC GROWTH FACTOR
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,
ADDRESSEE: STEWART & OLSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: HUDSON, PEIER -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: THIBEAULT
STREET: 53 STATE STREET
CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: KELLEY, ROBIN D. REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                              STREET: 6 BECKI
CITY: ROSELAND
STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                 COUNTRY: U
            REFERENCE/DOCKET NUMBER: 325800-329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                 Sn
                         NUMBER: 36,134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                        PETER L
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                                                                                                                 ; MOLECULE TYPE: protein US-09-361-741-3
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US-09-361-741-3
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                                                    Matches
                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION NUMBER: 08/411,607
APPLICATION NUMBER: 08/411,607
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-329
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 20; Conservative C
                                                                                                                                                                                           TELEPHONE: (201)994-1700
TELEFAX: (201)994-1744
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/09361741 Patent No. 6500638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (201) 994-1744
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Flopy disk

COMPUTER: IBM PC compartible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Parentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/361,741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,
ADDRESSEE: STEWART & OLSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: HUDSON, PETER L
APPLICANT: ROSEN, CRAIG A
APPLICANT: HE, WEI WU
TITLE OF INVENTION: PROSTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (201)994-1700
                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U
ZIP: 07068
                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 432 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     387 INPETVPKPCCAPTQLNAIS 406
                                                    20;
1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ROSELAND
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                                                    Conservative
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                                                                                                                                                   linear
                                                                                                                                                               single
                                                               100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.3e-07;
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                                                  Mismatches
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                                                                              Length 432;
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RESULT 186
US-07-841-646-13
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US-09-461-418-3
                                                                                                                                                                                                                Sequence 13, Application US/07841646 Patent No. 5266683 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 111; DB 4;
Best Local Similarity 100.0%; Pred. No. 2.3e-07;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/09461418
Patent No. 6521227
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (201) 994-1
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                               APPLICANT: OPERMANN, HERMAN
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, TH
APPLICANT: RUEGER, DAVID C.
                                                                    APPLICANT: RUEGER, DAVID APPLICANT: PANG, ROY H.L TITLE OF INVENTION: OSTE
                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPOTTER: IBM PC compatible
COMPOTTER: IBM PC compatible
COMPOTTER: IBM PC compatible
COMPOTTER: IBM PC compatible
COMPOTTER: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/461,418
FILING DATE: 16-Dec-1999
CLASSIFICATION **CURROWN**
PRIOR APPLICATION NUMBER: US/08/411,607A
APPLICATION NUMBER: US/08/411,607A
FILING DATE: 11-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 325800-329
TELECOMMUNICATION ENORMATION:
TELEPHONE: (201)994-1700
     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 07068
COMPUTER READABLE FORM:
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TITLE OF INVENTION: PROSTATIC GROWTH FACTOR
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                   387 INPETVPKPCCAPTQLNAIS 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
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ROSEN, CRAIG A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         387 INPETVPKPCCAPTQLNAIS 406
                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 432 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: ROSELAND
STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI.
STEWART & OLSTEIN
TESTA, HURWITZ & THIBEAULT
                                                                    OSTEOGENIC DEVICES
                                                                                                                                                                                            HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                994-1744
                                                                                                                                           THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPERATING SYSTEM: PC-DOS/MS-DOS

STREET: 53 STATE STREET CITY: BOSTON STATE: MASSACHUSETTS

MASSACHUSETTS

U.S.A.

02109

Length 484; Indels

Gaps

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SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/841,646
FILING DATE: 19920221
CLASSIFICATION: 530
PRIOR APPLICATION UMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 20
                                                                                                                          PILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 599,543
PILING DATE: 18-OCT-1990
PRIOR APPLICATION UNMER: US 579,865
FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
PILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                     PILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 04-DEC-
PRIOR APPLICATION DATA:
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                                                    FILING DATE: 20-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 483,913
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                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 28-JAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 8 FILING DATE: 20-DEC-1991
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CLASSIFICATION:
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                                                                                                          APPLICATION NUMBER:
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20; Conserv
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                                 CATION NUMBER: US 4
G DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MASSACHUSETTS
U.S.A.
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53 STATE STREET
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER: US 621,988
04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UMBER: US 827,052
28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 810,560
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                                                                                                            US 569,920
US 422,613
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APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990

PILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,849

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: US. 660,162

FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052

TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acids
TYPE: AMINO ACID

H: 484 amino acids
AMINO ACID

NGY

TYPE:

protein

TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000

NAME: PITCHER, EDMUND R REGISTRATION NUMBER: 27, REFERENCE/DOCKET NUMBER:

27,829

CRP-001CP6

APPLICATION NUMBER: US 2: FILING DATE: 15-AUG-1988 PRIOR APPLICATION DATA:

US 232,630

APPLICATION NUMBER: US 1 .FILING DATE: 08-APR-1988 ATTORNEY/AGENT INFORMATION:

US 179,460

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 4:
FILING DATE: 17-0CT-1989

US 422,613

FILING DATE: 20-20- PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 483,913

22-FEB-1990

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990

FILING DATE: 07-SEP-

APPLICATION NUMBER: FILING DATE: 20-AU

US 569,920

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1

18-OCT-1990

US 599,543

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                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
CLASSIFICATION E36
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
FILING DATE: 20-DEC-1991
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -08-447-570-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 23-FEB-19
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 15-AUG-19
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 8:
APPLICATION PRIOR BRIDGE 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 6:
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ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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LENGTH: 484 amino acids
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REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: OPPERMANN, HERMANN
APPLICANT: OZKAYNAK, ENGIN
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                               APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TLE OF INVENTION:
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5714589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                             MASSACHUSETTS
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hilarity 100.0%;
Conservative 0;
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15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-FEB-1989
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                                                                                                               US 827,052
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US 621,988
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RESULT 189
US-08-449-700-13
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 483,913
FILING DATE: 22-FBB-1990
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 315,342
FILING DATE: 23-FBB-1989
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 32,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 179,460
FILING DATE: US 179,460
FILING DATE: US 179,460
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
PILING DATE: .07-SEP-1990
PRIOR APPLICATION NUMBER: US 569,920
PRIOR DATE: 20-AUG-1990
                                                                                                                 APPLICANT: OPPERWALL,
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, ?
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amir
                                                                      PPLICANT: RUEGER,
PPLICANT: PANG, RO
                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100 es 20; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH:
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                                                                                                                                                                     OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-NOV-1990
                                                                                            ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EDMUND
                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 1;
100.0%; Pred. No. 2.6e-07;
ative 0; Mismatches 0;
                                                                                                            DAVID C.
                                                                          OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 600,024
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                                                                                                                               THANGAVEL
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Gaps

COUNTRY: U. ZIP: 02109

Length 484;

Indels

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INFORMATION FOR SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino actions are actions and actions amino actions are actions and actions amino actions are actions and actions are actions and actions are actions and actions are actions and actions actions are actions and actions are actions actions actions are actions actions actions actions are actions action
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PRIOR APPLICATION DATA:
APPLICATION MOMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1000
PRIOR APPLICATION NUMBER: US 621,849
PRIOR APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 179
FILING DATE: 08-AFR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,82
REFERENCE/DOCKET NUMBER: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 5
FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 530
CRASSIFICATION DATA:
PRIOR APPLICATION DATA:
US 810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
APPLICATION NUMBER: 17-0CT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 569,920
FILING DATE: 20-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
PRIOR APPLICATION NUMBER: US 483,913
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PRIOR APPLICATION DATA:

OR OF THE PRIOR OF
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APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
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APPLICATION NUMBER: 1
FILING DATE: 18-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
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FILING DATE: 21-FEB-1992
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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18-OCT-1990
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3-09-140 ... Appilum Sequence 13, Appilum Sequence 13, Appilum Sequence 13, Appilum Sequence 19, Patent No. 6551995 ... GENERAL INFORMATION: OPPERMANN, HERMANN OZKAYNAK, ENGIN OZKAYNAK, ENGIN THA
                                                                                                                                                                                                                                                                                                         RESULT 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13,
Patent No. 5
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Best Local
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Best Local Similarity
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FILING DATE: 24-MAY-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/147,023
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acids
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TLE OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      439 INPETVPKPCCAPTQLNAIS 458
                                                                                                                                                                                                                                                                                                                                                                                                                                 439 INPETVPKPCCAPTQLNAIS 458
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5958441
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125 HIGH STREET
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OZKAYNAK, ENGIN
KUBERASAMPATH, TH
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617/248-7000
617/248-7100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANTIBODIES TO OSTEOGENIC PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 2; 100.0%; Pred. No. 2.6e-07,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/449,699A
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                             THANGAVEL
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Length 484;

Indels

0,

Gaps

0,

FILING DATE:

MOLECULE TYPE: -08-449-700-13

Length 484; Indels

0

Gaps

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TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US OF FILING DATE: 17-CCT-1989
APPLICATION NUMBER: US OF FILING DATE: 17-CCT-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
                                                                                                                                                     REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION: INFORMATION:
TELEPHONE: 617/248-7000
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TITLE OF INVENTION: OSTBOGENIC DEVICES
NUMBER OF SEQUENCES: 3

CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBE:
STREET: 125 HIGH STREET
                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/621,988 FILING DATE: 4-DEC-1990 APPLICATION NUMBER: US 07/810,560 APPLICATION NUMBER: US 07/810,560
                                                                                                                                                                                                                                                                                NAME: DIANA M. STEEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US (
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LENGTH: 484 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 0'
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/483,913 FILING DATE: 22-FEB-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/827,052 FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/179,406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/579,865
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PPLICATION NUMBER: US 07/599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PLICATION NUMBER: 1991
LING DATE: 22-FEB-1991
OF THE PROPERTY 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATION NUMBER: US 07/841,646
NG DATE: 21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-APR-1988
NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-DEC-1991
NUMBER: US 0
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SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-148-925C-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 192
US-08-957-425-13
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Patent No. 6586388
GENERAL INFORMATION:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: OSTEOGENIC DEVICES
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                                                                                      FILING DATE: 22-FEB-
APPLICATION NUMBER:
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FILING DATE: 24-Oct-1997
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CITY: BOSTON
                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                                                                                                                        APPLICATION NUMBER: US
                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 621,849
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STREET: 53 STATE STREET
                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US
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APPLICATION NUMBER: US 621,988
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                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: US 599,543
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RUEGER, DAVID C.
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                                                               17-OCT-1989
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                                                                                         US 422,613
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Pred. No. 2.6e-07;
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APPLICATION NUMBER: US 232,630 FILING DATE: 15-AUG-1986 FILING TON NUMBER: US 179,460 FILING DATE: 08-APR-1988

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RESULT 193
US-08-278-729A-6
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Best Local Similarity
                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/8/278,729A
FILING DATE: 20-UUL-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER Esq., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-058CPFW
TBLECOMMUNICATION INFORMATION:
TELEDRONEY. (508) 435-9001
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                                                                                                     TELEFAX: (508) 435-6951 INFORMATION FOR SEQ ID NO: 6:
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                                                                                                                                                                                                                                                                                                                                                                          ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acid
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CITY: HOPKINTON
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                              STRANDEDNESS:
ICPOLOGY: 1
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NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-001CP6
REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                       ELEPHONE:
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                                                 amino acids
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TYPE: amino acid
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45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                USA
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                 linear
                                                                                                                                     (508) 435-9001
protein
                            single
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CHARLES M.
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В

INPUTVPKPCCAPTQLNAIS 113

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Query Match
Best Local Similarity
Thiches 19; Conserve
                                                                                               NAME/KEY: Protein
LOCATION: 1.139
OTHER INFORMATION:
US-08-155-343A-6
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                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/155,343A
FILING DATE: 15-NOV-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: 36,508
REFERENCE/DOCKET NUMBER: 36,508
TELLEPHONE: (617) 248-7560
TELEPHONE: (617) 248-7560
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                          TELEPHONE: (617) 248-7560
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MORPHOGENIC-INDUCED PERIODONTAL TISSUE TITLE OF INVENTION: REGENERATION.
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                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 45 CONTROL HOPKINTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                  OPOLOGY:
                                                                                                                                                                                                                                              ENGTH:
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   1 INPETVPKPCCAPTOLNAIS 20
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                                                                                                                                                                                                                                               139 amino acids
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COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                           uss: single
linear
                                  Conservative
                                                                                                                                                                               protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97.3%;
                                                  97.3%;
95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "MOP-1 (MATURE FORM)"
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                                                                                                                  /note= "MOP-1 (MATURE FORM)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 108; DB 1;
Pred. No. 1.9e-07
                                  1; Mismatches
                                                  Score 108; DB 1;
Pred. No. 1.9e-07
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                                    Gaps
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RESULT 196
US-08-643-563A-6
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                                                                Sequence 6, Application US/08643563A Patent No. 5707810
                                                                                                                                                                                                                                                           Query Match
Best Local .
                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 667,274
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APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR TITLE OF INVENTION: INCREASE BONE MASS IN METABOLIC BONE DISEASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                      LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: FENTON ESq., GILLIAN M. REGISTRATION NUMBER: 36,508 REFERENCE/DOCKET NUMBER: CRP-
                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 20 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                       Local
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INFORMATION:
CANT: SMART, JOHN
CANT: OPPERMANN, HERMAN
CANT: OZKAYNAK, ENGIN
                                                                                                                                                                       94 INPDTVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           139 amino acids
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OZKAYNAK, ENGIN
RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                            Protein
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                                                                                                                                                                                                                                                       97.3%;
                                                                                                                                                                                                                                                                                                                        /note= "MOP-1 (MATURE FORM)"
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ER: CRP-060CN
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Pred. No. 1.9e-07;
                                                                                                                                                                                                                                       Mismatches
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RESULT 197
US-08-643-763A-6
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                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/08643763A Patent No. 5733878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 97.3%;
Best Local Similarity 95.0%;
                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (508) 435-6951 (INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARB: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/643,563A
FILING DATE: 06-MAY-1996
CLASSIFICATION: 435
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                          APPLICANT: KUBERASAMPATH, THANGAVEL APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY ESG., MICHAEL J.
REGISTRATION NUMBER: 38, 349
REFERENCE/DOCKET NUMBER: CRP-058CN2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: MA
COUNTRY: US
ZIP: 01748
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                                                                          STREET: 45 SOUTH CITY: HOPKINTON STATE: MA
                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                       94 INPDTVPKPCCAPTQLNAIS 113
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USA
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                                                                                                                45 SOUTH STREET
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PANG, ROY H.L.
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Pred. No. 1
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
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NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESQ., GILLIAN M.
                                                                                                                                               COMPUTER READABLE FORM:
MBDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: OZKAYNAK, ENGIN
APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: WORPHOGEN TREATMENT OF GASTROINTESTINAL
TITLE OF INVENTION: ULCERS.
NUMBER OF SEQUENCES: 33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 06-MAY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: single
                                                                                                                APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                           COUNTRY:
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PANG, ROY H.L.
OZKAYNAK, ENGIN
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CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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95.0%;
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ZIP: 01748
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARKE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/451,953A
FILING DATE: 26-MXY-1995.
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
ATTAINED FOR TENATION
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRISTAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
         TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
                                                                                                      NAME: PITCHER ESG., EDMUND I REGISTRATION NUMBER: 27,829 REFERENCE/DOCKET NUMBER: CR. TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESSE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /note= "MOP-1 (MATURE FORM)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SECULE TYPE: protein
                                                                                       ELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                      HOPKINTON
i: 139 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INVENTION:
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linear
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RUEGER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KUBERASAMPATH,
                                                                                         (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORPHOGENIC PROTEIN SCREENING METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97.3%;
95.0%;
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                                                      <u>ب</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Mismatches
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                                                                                                                               CRP-058CN
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Pred. No. 1.
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.9e-07;
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TOPOLOGY: li

TRANDEDNESS:

ss: single linear

NAME/KEY:

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Search completed: October 26, 2004, 07:51:28 Job time : 46 secs
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; OTHER INFORMATION: /note= "MOP-1 (MATURE FORM)"
US-08-451-953A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 200
US-08-445-468A-6
                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-072FW2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                         Query Match 97.3
Best Local Similarity 95.0
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 97.3
Best Local Similarity 95.0
Matches 19; Conservative
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Patent No. 5849686
GENERAL INFORMATION:
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: RUEGER, DAVID C.
APPLICANT: OPPERMANN, HERMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Very
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,468A
FILING DATE: 22-MAY-1995
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: PANG, ROY H.L.

APPLICANT: COHEN, CHARLES M.

TITLE OF INVENTION: WORPHOGEN-INDUCED LIVER REGENERATION NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                           NAME/KEY: Protein LOCATION: 1.139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: sin
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: HOPKINTON
                                                                            94 INPDTVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                     97.3%; Score 108; DB 2; Length 139; 95.0%; Pred. No. 1.9e-07; ive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.3%; Score 108; DB 1; Length 139; 95.0%; Pred. No. 1.9e-07; tive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                           /note= "MOP-1 (MATURE FORM)"
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  Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB seq
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                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                     Published Applications AA:*

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3: /cgn2 6/ptcdata/2/pubpaa/US06_NEW PUB.pep:*

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Maximum Match 100%
Listing first 200
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US-10-619-910-11

US-09-754-831A-39

US-09-791-946-1

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US-10-115-406-12

US-10-115-406-12

US-10-154-333-12

US-10-154-333-12

US-09-813-459-13

US-09-813-459-13
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(without alignments)
134.899 Million cell updates/sec
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Compugen Ltd
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13 US-08-260-675-19
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US-10-619-910-11

(Sequence 11, Application US/10619910

Publication No. US20040053844A1

GENERAL INFORMATION:

APPLICANT: Kyocera Corporation

APPLICANT: Nishimura, Yoshihiko

APPLICANT: Nishimura, Yoshihiko

APPLICANT: Suzuki, Yoshihisa

APPLICANT: Suzuki, Yoshihisa

APPLICANT: Tanihara, Masao

TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator

FILE REFERENCE: 81918-0001

CURRENT APPLICATION NUMBER: US/10/619,910

CURRENT FILING DATE: 2003-07-15

PRIOR APPLICATION NUMBER: US/09/439,779B

PRIOR TILING DATE: 2001-09-10

NUMBER OF SEQ ID NOS: 11

SOFTWARE: PatentIn version 3.1

SEQ ID NO 11

LENGTH: 20

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION::
   Query Match
Best Local Similarity
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US-09-754-831A-15

US-09-754-831A-14

US-09-754-831A-14

US-10-187-394-9

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US-10-154-333-14

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US-09-952-318A-8

US-09-952-318A-30

US-09-952-318A-3
   Score 111; DB 15;
Pred. No. 7.8e-08;
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Sequence 28, Appl
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Sequence 14, Appl
Sequence 14, Appl
Sequence 17, Appl
Sequence 25, Appl
Sequence 25, Appl
Sequence 27, Appl
Sequence 27, Appl
Sequence 301, Appl
Sequence 300, Appl
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US-09-791-946-1
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SEQ ID NO 39
LENGTH: 97
TYPE: PRT
CRGANISM: mammalian
                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/09791946
Patent No. US20020028453A1
GENERAL INFORMATION:
APPLICANT: KECK, PETER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 39, Application US/09754831A Publication No. US20030228345A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILLING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR FILING DATE: 1989-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -09-754-831A-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 07/232,630 PRIOR FILING DATE: 1988-08-15 PRIOR APPLICATION NUMBER: US 07/179,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: STX-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Oppermann, Herman
APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: OP1 shorter sequence capable of inducing endochondral bone forma
                                                                                                                                                                                                   TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PRODUCING MORPHOGEN ANALOGS
COMPUTER READABLE FORM:
                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT
                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52 INPETVPKPCCAPTQLNAIS 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 INPETVEKECCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20; Conservative
                   COUNTRY: USA
ZIP: 01748
                                                             STATE: MA
                                                                              STREET: 45 SOUTH STREET CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ozkaynak, Engin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kuberasampath, Thangavel
Rueger, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                         GRIFFITH, DIANA L
CARLSON, WILLIAM D
RUEGER, DAVID C
                                                                                                                                                                                                                                              SAMPATH, KUBER T
                                                                                                                                          PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 10; 100.0%; Pred. No. 3.5e-07;
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; LOCATION: 1.102
; OTHER INFORMATION: /product= "hOP-1"
; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-791-946-1
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                                                                                                  CURRENT APPLICATION NUMBER: US/10/187.394

CTARGET APPLICATION NUMBER: US/10/187.394

CLASSTON 28-17777
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                   CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/496,398
FILLING DATE: 02-FEB-2000
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ ADDRESSEE: THIBEAULT, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: KECK, PETER
APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINGLE CHAIN ANALOGS O
TITLE OF INVENTION: SUPERFAMILY (MORPHONS)
NUMBER OF SEQUENCES: 45
                                                                                                                                                                                                                                                                                                                         STREET: 125 H
CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                    COUNTRY: U:
ZIP: 02110
  APPLICATION NUMBER: US 08/478,097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-102
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/786,284
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
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USA
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FILING DATE: 22-Feb-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 102 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-0992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10187394
No. US20030176667A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : YEOTOGY
                                                                                                                                                                                                                                                                                                                                                                       125 HIGH STREET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SINGLE CHAIN ANALOGS OF TGF-B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 111; DB 9;
Pred. No. 3.7e-07;
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US-09-754-831A-9
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                                                                                                                                                            Sequence 9, Application US/09754831A Publication No. US20030228345A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/10164279
Publication No. US20030185792A1
GENERAL INFORMATION:
APPLICANT: Keck, P.
TITLE OF INVENTION: MORPHOGEN ANALOGS OF BOND MORPHOGENIC PROTEINS
FILE REFERENCE: CIBT-P04-566
CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT FILING DATE: 2002-06-06
PRIOR APPLICATION NUMBER: 09/791946
PRIOR APPLICATION NUMBER: 09/791946
PRIOR APPLICATION NUMBER: 09/791946
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 64
SOFTWARE: Patentin version 3.1
SEQ ID NO 4
APPLICANT: Oppermann, Herman
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
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Matches
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 102
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGBNT INFORMATION:
NAME: PITCHER ESQ, EDWUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-248-7100
TELEPHONE: 617-248-7100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: (CLASSIFICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
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                                                                                                                                                                                                                                                                                                    57 INPETVPKPCCAPTQLNAIS 76
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                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                  20; Conservative
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Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 14; 100.0%; Pred. No. 3.7e-07;
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Pred. No. 3.7e-07;
                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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US-09-389-705-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: UOFMD.003C1
CURRENT APPLICATION NUMBER: US/09/813,398
CURRENT FILING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: PCT/US99/05908
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: PCT/US98/19772
PRIOR FILING DATE: 1998-09-22
PRIOR FILING DATE: 1998-09-22
NUMBER OF SEQ ID NOS: 41
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US-09-813-398-30
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US-09-754-831A-9
                Sequence 12, Application US/09389705
Publication No. US20010018509A1
GENERAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
PRIOR PPLICATION NUMBER: US 07/315,342
PRIOR FILING DATE: 1989-02-23
PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 20; Conservative 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Bruce D. Weintraub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 30,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Mariusz W. Szkudlinski
APPLICANT: University of Maryland
TITLE OF INVENTION: CYSTIME KNOT GROWTH FACTOR MUTANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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PRIOR FILING DATE: 1995-01-20
PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 107
TYPE: PRT
ORGANISM: mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 9;
Pred. No. 4.1e-07;
                                                                                                                                                                                                                                                87
                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                            Length 112;
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Gaps

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Sequence 10. Application US/10115406

Sequence 10. Application WS/20127612A1

; Publication No. US20020127612A1

; GENERAL INFORMATION:
    APPLICANT: ILE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
    APPLICANT: LEE, Se-Jin
    APPLICANT: LEE, Se-Jin
    TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9

FILE REFERENCE: JH11190-3

; CURRENT APPLICATION NUMBER: US/10/115,406

CURRENT FILING DATE: 2002-04-02

PRIOR APPLICATION NUMBER: US/301,520

PRIOR APPLICATION NUMBER: US/30172,062

PRIOR APPLICATION NUMBER: US 09/172,062

PRIOR APPLICATION NUMBER: US 08/491,835

PRIOR APPLICATION NUMBER: US 08/491,835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 1..118
;
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-389-705-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
US-10-115-406-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                              NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 12: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: BM PC compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03.5ep-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME NORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
NO 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
20; Conserv
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STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: WETHERELL, JR. Ph.D., JOHN R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 118 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLONE: OP-1
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                                                                                                                                                                                                                       NAME/KEY: Protein
LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-10-154-333-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
US-10-154-333-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local Similarity
                                                                                                                                     Matches
                                                                                                                                                                                 Query Match
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TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (619) 455-5
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Versi

CURRENT APPLICATION UNMEER: US/10/154,333

FILING DATE: 21-May-2002

CLASSIFICATION INTERES: US/09/389,705

PRIOR APPLICATION NUMBER: US/09/389,705

FILING DATE: 03-Sep-1999

APPLICATION NUMBER: 09/153,733

FILING DATE: <UNKnown>

ATTORNEY/AGENT INFORMATION:

NAME: WETHERELL, UR. Ph.D., JOHN R.

REGISTRATION UNMEER: 31,678

REFERENCE/DOCKET NUMBER: FD2279 PCT

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEB: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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                                73
                                                                                    1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 118 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                     CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (619) 455-5100
                                                                                                                                                           100.0%;
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Pred. No. 4.3e-07
                                      92
                                                                                                                                           Mismatches
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                                                                                                                                                                                            DB 14;
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RESULT 12
US-09-813-459-13
Sequence 13, Application US/09813459
Patent No. US20020107369A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 10/115,406
PRIOR FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR PILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
NUMBER OF SEQ ID NOS: 28
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10, Appublication No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION
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FILE REFERENCE: JHUIL90-7
CURRENT APPLICATION NUMBER: US/10/704,223
CURRENT FILING DATE: 2003-11-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: THE JOHNS HOPKINS UNIVERSITY APPLICANT: LEE, Se-Jin
            COMPUTER REALABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC COMPUTER: COMPUTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENGTH: 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cunningham, No. US20020107369Aleen
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Lee, Se-Jin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 90067
REFERENCE/DOCKET NUMBER: PD-3054
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No. US20040152143A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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Pred. No. 4.3e-07;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 118;
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                                                                       Query Match
Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: 08/862,445
PRIOR TILING DATE: 1997-05-23
PRIOR PELLING DATE: 1997-04-28
PRIOR APPLICATION NUMBER: 08/847,910
PRIOR FILING DATE: 1997-04-28
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: 08/525,596
PRIOR APPLICATION NUMBER: 08/525,596
PRIOR FILING DATE: 1995-10-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 40, Application of the No. US20020157125A1
                                                                                                                                                                                                                         SEQ ID NO 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 51
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: PCT PRIOR FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
PRIOR APPLICATION NUMBER: 09/019,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 08/033,923
                                                                                                                                                               LENGTH: 119
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
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SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
74 INPETVEKECCAPTOLNAIS 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      al Similarity 100.
20; Conservative
                       1 INPETVPKPCCAPTQLNAIS 20
                                                                       l Similarity
20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (61
TELEFAX: (619)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH: 119 amino acids
                                                                       100.0%; Score 111; DB 9; llarity 100.0%; Pred. No. 4.3e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
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Pred. No. 4.3e-07
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                                                                                                         Length 119;
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                                                                       0;
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RESULT 14 US-09-880-708-18 ; Sequence 18, Application US/09880708 ; Patent No. US20020165361A1

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US-09-872-856-40; Sequence 40, Application US/09872856; Publication No. US20030074680A1
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                  PRIOR APPLICATION NUMBER: US 09/124,180 PRIOR FILING DATE: 1998-07-28 PRIOR APPLICATION NUMBER: US 09/019,070 PRIOR FILING DATE: 1998-02-05 PRIOR APPLICATION NUMBER: US 08/862,445 PRIOR FILING DATE: 1997-05-23 PRIOR FILING DATE: 1997-05-23
                                                                                                                                                                              APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
FILE REFERENCE: JHU1120-17
CURRENT APPLICATION NUMBER: US/09/872,856
CURRENT FILING DATE: 2001-06-01
                                                                                                                                                                                                                                                                                                        APPLICANT: Johns Hopkins University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 18: SEQUENCE CHARACTERISTICS:
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FILING DATE: «Unknown»
APPLICATION NUMBER: 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 92121-2189
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: proteil IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 12-Jun-2001 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/880,708
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OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 858/677-1456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: San Diego
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 119 amino acids
                                   ATION NUMBER: US 08/847,910
                                                                                                                                                                                                                                                                                      Lee, Se-Jin
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08/795,071
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Pred. No. 4.3e-07;
); Mismatches 0;
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; TYPE: PRT ; ORGANISM: Homo sapiens US-09-872-856-40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/US 94/03019
PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR FILING DATE: 1995-10-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.1
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                                         INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                     COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
ODERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.6
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNMBER: US/10/335,483
FILLNG DATE: 31-Dec-2002
CLASSIFICATION: CURROWN>
PRIOR APPLICATION NUMBER: US/09/177,860
APPLICATION NUMBER: US/09/177,860
FILLING DATE: 4URKNOWN>
APPLICATION NUMBER: 08/525,596
FILLNG DATE: 19-SEP-1995
APPLICATION NUMBER: PCT/US94/07762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
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ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8 NUMBER OF SEQUENCES: 32
                                                                                                                                    TELECOMMUNICATION INFORMATION:
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                                                                                                                                                        NAME: Wetherell, Jr., Ph.D, John R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10335483
TYPE: amino acid
                   LENGTH: 119 amino acids
                                                                                     TELEFAX: 619-678-5099
                                                                                                            ELEPHONE: 619-678-5070
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Pred. No. 4.3e-07;
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FEATURE

CLONE: OP-1 RE: NAME/KEY:

Protein

MOLECULE TYPE: protein IMMEDIATE SOURCE:

TOPOLOGY: linear

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RESULT 18
US-10-693-536-12
; Sequence 12, Application US/10693536
; Publication No. US20040067556A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Pa
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR FILING DATE: 1995-10-25
PRIOR APPLICATION NUMBER: PCT/US 94/03019
PRIOR FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US/09/872,856
PRIOR FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 09/124,180
PRIOR FILING DATE: 1998-07-28
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR FILING DATE: 1998-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: McPherron, Alexandra TITLE OF INVENTION: Growth Differentiation FILE REPERENCE: JHU1120-17 CURRENT APPLICATION NUMBER: US/10/463,973 CURRENT FILING DATE: 2003-06-17
                                                                                                                           GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: US 08/847,910
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                                                                                                                                                                                                                                                                                                                                                                          Local
       Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO: 22:
                                                                                                                                                                                                                                                                              74 INPETVPKPCCAPTQLNAIS 93
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20; Conserv
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CITY: La Jolla
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ilarity 100.0%;
Conservative 0
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100.0%; Pred. No. 4.3e-07;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 15;
Pred. No. 4.3e-07;
                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Factor-8
                                                                                                                                                                                                                                                                                                                                                                                      Length 119;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 119;
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US-10-758-210-12
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Best Local :
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FILE REFERENCE: JHU1130-2
CURRENT APPLICATION NUMBER: US/10/758,210
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR APPLICATION NUMBER: US 08/581,528
PRIOR FILING DATE: 1999-00-09
PRIOR PILING DATE: 1996-01-09
PRIOR PILING DATE: 1996-07-09
PRIOR APPLICATION NUMBER: US 08/581,528
PRIOR FILING DATE: 1994-07-08
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin version 3.0
SEQ ID NO 12
LENGTH: 119
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 12, Application US/10758210 Publication No. US20040127696A1
                                                                                                                                                                                                                                                                                                                                                        APPLICANT: LEE, Se-Jin
APPLICANT: HUYNH, Thanh
TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/09/619,061
FILING DATE: 18-Jul-2000
APPLICATION UNMBER: US/09/097,616
FILING DATE: 15-JUN-1998
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/693,536
FILING DATE: 23-Oct-2003
CLASSIFICATION: <URKnown>
FRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: OTHER
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: FROM PC-DOS/MS-DOS

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein IMMEDIATE SOURCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLONE: OP-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
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TELEFAX: (619) 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 15; ilarity 100.0%; Pred. No. 4.3e-07; Conservative 0; Mismatches 0;
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                                                                                                             TELEFAX: 617/248-7100

INFORMATION FOR SEQ ID NO: 5

SEQUENCE CHARACTERISTICS:

LENGTH: 139 amino acids

TYPE: amino acids
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APPLICANT: COHEN, CHARL
TITLE OF INVENTION: MOR
TITLE OF INVENTION: REP
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                          MOLECULE TYPE:
ORIGINAL SOURCE:
ORGANISM: Hon
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APPLICATION NUMBER:
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                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                         FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 55
STREET: BOSTON
                                                                                                                                                                                                                            REGISTRATION NUMBER: 27 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                   STRANDEDNESS: SIN
                             IISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
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OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
COHEN, CHARLES M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: TESTA HURWITZ & THIBEAULT
55 STATE STREET
                                                                                                                                                                             617/248-7100
617/248-7100
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                                                                      protein
                                                                                                     single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 111; DB 16; 100.0%; Pred. No. 4.3e-07;
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                                                                                                                                                                                                                                    27,829
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; OTHER INFORMATION:
US-08-260-675-5
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RESULT 22
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                                                                                                                                                                    US-09-882-875A-1
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Best Local Similarity
Matches 20; Conserv
                                                                                                        Matches
                                                                                                                                    Query Match
                                                                                                                       Best Local
                                                                                                                       Similarity
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                                               INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 02110
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Sequence 1, Application US
Patent No. US20020151985A1
GENERAL INFORMATION:
APPLICANT: KUBERASA
                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 09/104,865
FILING DATE: 25-JUN-1998
APPLICATION NUMBER: US 08/443,676
FILING DATE: 18-MAY-1995
APPLICATION NUMBER: US 07/529,852
FILING DATE: 29-MAY-1990
ATTORNEY/AGENT INFORMATION:
NAME: VITO, Christine C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/09/882,875A
FILING DATE: 15-Jun-2001
CITATION DATE: 15-Jun-2001
                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7000
                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: SYNTHETIC BONE MATRIX NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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1 INPETVEKECCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09882875A
                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 39,061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 125 High St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Patent Administrator, Testa, Hurwitz & Thibeault, LLP
                                                                                                                                                                                                                                LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                       (617) 248-7100
                                                    100.0%;
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                                    0,
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                                                    Score 111; DB 9
Pred. No. 5e-07;
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                                    Mismatches
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                                                                           DB 9;
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                                        Indels
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US-10-050-050-5
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-952-318A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR APPLICATION NUMBER: 07/923,780
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Best Local
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SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/09952318A Publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/
PRIOR FILING DATE: 1991-08-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION - (Unknown-
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELL.
                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 INPETVPKPCCAPTQLNAIS 113
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20; Conserv
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                                                                                                                                                                                                                                                                                                           ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET CITY; HOPKINTON STATE: MA
                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 1 ilarity 100.0%; Pred. No. 5e-07; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPPERMANN, HERMANN PANG, ROY H.L. OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOHN E
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                                                                                                                                                 Version #1.30
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US-10-108-260A-2783
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US-10-366-345-63
Sequence 63, Application US/10366345
Publication No. US20030224501A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-10-366-345-63
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HIZIX RESEARCH INSTITUTE
TITLE OF INVENTION: NO. US20040005560A1el full length cDNA
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF 5EQ ID NOS: 5458
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn version 3.2
SEQ ID NO 63
LENGTH: 139
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APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides and
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT18
                                                                                                                                                     Sequence 2783, Application US/10108260A
Publication No. US20040005560A1
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Best Local Similarity 100.0%;
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CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
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                                                                                                                                                                                                                                                                        94 INPETVPKPCCAPTOLNAIS 113
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OTHER INFORMATION:
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ilarity 100.0%;
Conservative (
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Pred. No. 5e-07;
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Pred. No. 5e-07;
); Mismatches
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US-10-385-064-5
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US-09-765-527-249
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LENGTH: 139
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                   Sequence 249, Application US/09765527 Patent No. US2002000638A1 GENERAL INFORMATION:

APPLICANT: Better, Marc D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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Publication No. US20040102373A1
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Best Local
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LENGTH: 139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cohen, Charles M.
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CBM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR APPLICATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'To
                                                                                                                                                                                                                                               TITLE OF INVENTION: Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 INPETVEKECCAPTOLNAIS 113
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l Similarity 100.0%;
20; Conservative 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                     COUNTRY: United States of America ZIP: 60606-6402
                                                                                                                                    CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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100.0%; Pred. No. 5e-07;
tive 0; Mismatches 0;
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Tower, 233
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Pred. No. 5e-07;
Pred. No. 5e-07;
                                                                                                                                                                         Gerstein, Murray & Borun
South Wacker Drive
               Version #1.25
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US-09-760-397-2
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                                                                                                                                                                                                                                                                                                                                        Local
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TOPOLOGY: Innear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 249:
US-09-765-527-249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:

APPLICANT: Better, Marc D.

APPLICANT: Gavit, Patrick D.

APPLICANT: Gavit, Patrick D.

TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production

TILE REFERENCE: 1103/11041US01

CURRENT FILING DATE: 2001-01-12

CURRENT FILING DATE: 2001-01-12

PRIOR APPLICATION NUMBER: 09/271,970

PRIOR FILING DATE: 1999-03-18

NUMBER OF SEQ ID NOS: 16

SOFTWARE: PATENTIN Ver. 2.0

SEQ ID NO 2
                                                                                                                                                    Sequence 2, Application US/10324182 Publication No. US20030194782A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/09760397 Patent No. US20020009781A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                   APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: US/10/324,182
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/09/271,970
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INFORMATION FOR SEQ ID NO: 249:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/621,803
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, MICHAEL F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/3:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                   116 INPETVPKPCCAPTQLNAIS 135
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100.0%; Pred. No. 5.7e-07;
Live 0; Mismatches 0;
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Pred. No. 5.7e-07
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NUMBER OF SEQ ID NOS: 16
SSOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 161
TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-324-182-2
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0,

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <Unknown>
                                     APPLICATION NUMBER: US 483,913 FILING DATE: 22-FEB-1990
                                                                                                                FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: MASSACHUSETTS
                                                                                             APPLICATION NUMBER: US 569,920
                                                                                                                                  APPLICATION NUMBER: US 579,865
                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                             APPLICATION NUMBER: US 600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 660,162 FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION DATA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/447,570
                                                                                                                                                                                                                                    TILING DATE:
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OZKAYNAK, ENGIN
THANGAVEL
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RUEGER, DAVID C
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                                                                                                                                                     18-OCT-1990
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                                                                            20-AUG-1990
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                                                                                                                                                                          US 599,543
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Pred. No. 5.7e-07;
Mismatches 0;
                  422,613
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US-10-321-799-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 169 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 9, Application US/10321799 Publication No. US20030224996A1
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Best Local Similarity
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APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                 ZIP: 02110

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Ve:

SOFTWARE: Patentin Release #1.0, Ve:

CURRENT APPLICATION DATA:

APPLICATION UNMBER: US/10/321,799

FILING DATE: 17-Dec-2002

CLASSIFICATION: CUNKNOWN>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB--989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REFERENCE/DOCKET NUMBER: CRP-0010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWIT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                    APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
                                 FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: U.S.A.
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RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
NUMBER: US 07/621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROY H.L.
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THANGAVEL
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Pred. No. 6e-07;
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; LENGTH: 169 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
sEQUENCE DESCRIPTION: SEQ ID NO:
US-10-321-799-9
                                                                                                                                                                                                                                                                                                                     RESULT 32
US-10-428-997A-9
                                                                                                                                                                                                                  Sequence 9, Application US/10428997A
Publication No. US20040077546A1
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
OZKAYNAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-0CT-1989
ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
DIANA M. STEEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
                                                                                                                                TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                              124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 617/248-7100
N FOR SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
STATE: MASSACHUSETTS COUNTRY: U.S.A. ZIP: 02110
                                                                       ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                         CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LICATION NUMBER: US 07/616,374
ING DATE: 21-NOV-1990
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ICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATION NUMBER: US 07/599,543 IG DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATION NUMBER: US 07/179,406
                                                                                                                                                                                      KUBERASAMPATH, TI
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    617/248-7000
                                                                                                                                                                      ROY H.L
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Pred. No. 6e-07;
                                                                                                                                                                                                            THANGAVEL
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                                                                                                         TOPOLOGY: linear

MOLECULE TYPE: procein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-428-997A-9
                                           Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                              TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION NUMBER: US 08/957,425
APPLICATION NUMBER: US 08/957,425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                           l Similarity
20; Conserv
         1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US OFFILING DATE: 15-AUG-1988
APPLICATION NUMBER: US OFFII-1985
OFFII-1985
APPLICATION NUMBER: US OFFII-1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/10/428,997A
                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
                                                                                                                                                                                              LENGTH: 169 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US FILING DATE: 17-OCT-198 APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                   NAME: BRIAN FAIRCHILD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICATION NUMBER:
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PPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: US 08/147,023
TLING DATE: 1-NOV-1993
PPLICATION NUMBER: US 07/841,646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PLICATION NUMBER: US 07/599,543
LING DATE: 18-OCT-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PLICATION NUMBER: US 0
LING DATE: 08-APR-1988
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                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ON NUMBER:
                                                               100.0%;
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                                                                 Score 111;
Pred. No. 6
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                                               Mismatches
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US-09-765-527-257
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; ORGANISM: Human
US-10-324-182-8
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US-09-760-397-8
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                                                                                 Sequence 257, Application US/09765527 Patent No. US20020006638A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8, Application US/10324182
Publication No. US20030194782A1
GENERAL INFORMATION:
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/10/324,182
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/99/271,970
PRIOR FILING DATE: 1999-03-18
NIMBER DE GEO. TO NOC. 12
                                                                                                                                                                                                                                                                                                               Matches
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Patent No. US20020009781A1
GENERAL INFORMATION:
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APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: US/09/760,397
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 16
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ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 178
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APPLICANT: Better, Marc D.
TITLE OF INVENTION: Methods for Recombinant Microbial Production of
Fusion Proteins and BPI-Derived Peptides
NUMBER OF SEQUENCES: 265
                                                                                                                                                                                                                                  116
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20; Conserv
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20; Conserv
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                                                                                                                                                                                                                                                                                                           100.0%; ilarity 100.0%; Conservative 0
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ilarity 100.0%;
Conservative (
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Pred. No. 6.3e-07;
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Pred. No. 6.3e-07;
Nismatches 0;
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RESULT 36
US-09-765-527-261
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Best Local S
Matches 20
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INFORMATION FOR SEQ ID NO: 257:
SEQUENCE CHARACTERISTICS:
                                                                                                                           COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PATENT: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Ve
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
APPLICATION NUMBER: 08/621,803
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
APPLICATION UMMBER: 08/621,803
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Better, Marc D. TITLE OF INVENTION: Method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 257:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 20
                                                            APPLICATION NUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
APPLICATION DATA:
                                                                                                                                                                                                                                                                                                       STREET: 6300 Sears Tower,
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                              SPONDENCE ADDRESSE: Marshall, O'Toole,
ADDRESSEE: Marshall, O'Toole,
233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 179 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Illinois
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STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 9; ilarity 100.0%; Pred. No. 6.3e-07; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
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                                                                                                                                                                                                                                                                                                                                                   Gerstein, Murray & Borun
South Wacker Drive
                                                                                                                                                    Version #1.25
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
FILE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: US/09/760,397
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 14
LENGTH: 190
TYPE: PAT
ORGANISM: Human
ORGANISM: Human
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US-09-760-397-14
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                                                                                                                                                                                                                                                                                              Sequence 14, Application US/10324182 Publication No. US20030194782A1 GENERAL INFORMATION:
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Best Local (
                             APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/09/271,970
PRIOR APPLICATION NUMBER: US/09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 14
LENGTH: 190
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INFORMATION FOR SEQ ID NO: 261:
ORGANISM: Human
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Local Similarity 100.0%;
les 20; Conservative 0
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LENGTH: 179 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 261:
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REFERENCE/DOCKET NUMBER: 27:
TELECOMMUNICATION IMPORMATION:
TELEPHONE: 312/474-6300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 9; Length 190; ilarity 100.0%; Pred. No. 6.7e-07; Conservative 0; Mismatches 0; Indels
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Pred. No. 6.3e-07;
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TOPOLOGY: linear

HOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-765-527-255
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                                                                                                                                       RESULT 40
US-09-765-527-263
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 255, Application US/09765527
Patent No. US20020006638A1
GENERAL INFORMATION:
APPLICANT: Better, Marc D.
                                                                           Sequence 263, Application US/09765527 Patent No. US20020006638A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                           Best Local
                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 255:
SEQUENCE CHARACTERISTICS:
LENGTH: 194 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: Illinois

STATE: Illinois

COUNTRY: United States of America

ZIP: 60606-6402

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

APPLICATION DATA: 1,09/765,527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/621,803
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                 APPLICANT: Better, Marc D.
APPLICANT: Better, Marc D.
TITLE OF INVENTION: Methods for Recombinant Microbial Production of
Fusion Proteins and BPI-Derived Peptides
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                           116 INPETVPKPCCAPTQLNAIS 135
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                                                                                                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Chicago
                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 9; ilarity 100.0%; Pred. No. 6.8e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
      Fusion Proteins and : 265
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RESULT 41
US-08-957-425-11
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; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-765-527-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/08957425 Publication No. US20030069401A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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INFORMATION FOR SEQ ID NO: 263:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/621,803
RILING.DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: BOTUD, MICHAEL F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
TELECHONE: 312/474-6300
TELEPAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION UNMBER: US/08/957,425

FILING DATE: 24-Oct-1997

CLASSIFICATION: CUnknown>
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
CURRENT APPLICATION DATA:
APPLICATION MUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
COMPATIBLE COMPATIBLE
PRIOR APPLICATION DATA:
COMPATIBLE COMPATIBLE
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ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116
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                                                                                                                                                                                                                                                                                                                                                                                CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVEKECCAPTOLNAIS 135
                                                                                                                                                                                                                                                                                                                       ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.
   APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 195 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Chicago
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HURWITZ & THIBEAULT
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Pred. No. 6.9e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 195;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 42
US-10-321-799-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-957-425-11
                                                                                                                                                                                                                                                                                                                                           Sequence 11, Application US/10321799
Publication No. US20030224996A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                       CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: 617/248-7000
                                                                                                                      TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                         APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 317 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990 APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-FEB-1992 APPLICATION NUMBER: US 810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 660, 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 8; ilarity 100.0%; Pred. No. 1.1e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE:
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                                                                                                                                                                                                                 KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.
                                                                                                                                                                                                                                                                              OZKAYNAK, ENGIN
                                                                                                                                                                                      ROY H.L.
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STATE: MASSACHUSETTS
COUNTRY: U.S.A.
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25

SOFTWARE: PatentIn R CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAX-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993

APPLICATION NUMBER: US 07/621,849 FILING DATE: 4-DEC-1990

APPLICATION NUMBER: US 07/621,988

PPLICATION NUMBER: US 07/810,560

4-DEC-1990

LING DATE:

ING DATE:

ING DATE:

CATION NUMBER: US CATION NUMBER: US

APPLICATION NUMBER: US 07/579,865

7-SEP-1990

LING DATE:

PPLICATION NUMBER: US 07/827,052 ILING DATE: 28-JAN-1992

LICATION NUMBER: US 07/841,646 ING DATE: 21-FEB-1992

APPLICATION NUMBER: US 07/569,920

20-AUG-1990 20-DEC-1991

ING DATE: 18-OCT-1990

CATION NUMBER: US

07/616,374 07/599,543 07/600,024

CATION NUMBER: US

07/483,913

0

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RESULT 43
US-10-428-997A-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 11, Application US/10428997A Publication No. US20040077546A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 08/957,425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn R CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: OPPERMANN, HERMÂNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      272
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                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVEKECCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/10/428,997A FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 24-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 23-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US
                                                                                                                                                                         APPLICATION NUMBER: US FILING DATE: 21-NOV-199 APPLICATION NUMBER: US
                                                                                                                                                                                                                              FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                  PPLICATION NUMBER: US 07/621,988
'ILING DATE: 4-DEC-1990
PPLICATION NUMBER: US 07/810,560
ILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OF SEQUENCES:
                                                                                                     PPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                 PPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPLICATION NUMBER: US
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROY H.L.
ON: OSTEOGENIC DEVICES
                                                                                                                                       NUMBER: US 07/179,406
                                                                                                                                                                                              21-NOV-1990
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                                 US 07/660,162
US 07/422,699
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07/841,646
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                                                                   07/315,342
                                                                                                       07/232,630
                                                                                                                                                                           07/483,913
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US-10-321-799-11

MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:

11:

INFORMATION

SEQUENCE

LENGTH:

amino acid

TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000

TELEFAX: 617/248-7100 N FOR SEQ ID NO: 11:

CHARACTERISTICS:

REGISTRATION NUMBER: 43,153 REFERENCE/DOCKET NUMBER: ST

STK-001CP6C3

ATTORNEY/AGENT INFORMATION:

PLICATION NUMBER: US 07/422,623 LING DATE: 17-OCT-1989

FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 0'
FILING DATE: 17-OCT-1989

US 07/422,613

ILING DATE: 22-FEB-1991
PPLICATION NUMBER: US 07/422,699

L7-OCT-1989

LICATION NUMBER: US

07/660,162 07/315,342

23-FEB-1989 15-AUG-1988 08-APR-1988

CATION NUMBER:

CATION NUMBER: US 07/232,630 CATION NUMBER: US 07/179,406

NAME:

DIANA M. STEEL

Query Match Best Local Similarity

100.0%;

Score 111; DB 14; Pred. No. 1.1e-06;

Length 317;

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RESULT 44
US-08-957-425-15
US-08-957-425-15
; Sequence 15, Application US/08957425
; Publication No. US20030069401A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSEFICATION: «Unknown»
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 617/248-7100 MATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: BRIAN FAIRCHILD
REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      272 INPETVEKECCAPTOLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                 APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
PELING DATE: 28-DAN-1992
                                                                                 APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: BOSTON
STATE: MASSACHUSETTS
                                        APPLICATION NUMBER: US 621,849 FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.S.A.
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: TESTA, HURWI'
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 317 amino acids
TYPE: amino acid
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ilarity 100.0%;
Conservative (
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OZKAYNAK, ENGIN
THANGAVEL
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RUEGER, DAVID C.
                      NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROY H.L.
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Pred. No. 1.1e-06;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STK-015C1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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US-10-321-799-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: 15: US-08-957-425-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 111; DB 8; Best Local Similarity 100.0%; Pred. No. 1.4e-06; Matches '20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
               COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve:
SOFTWARE: Patentin Release #1.0, Ve:
APPLICATION DATA:
APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
CLASSIFICATION: CINKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 232,630
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                    PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363 INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 INPETVPKPCCAPTQLNAIS 20
APPLICATION NUMBER: US 09/148,925
                                                                                                                                                                                                                                       COUNTRY: U.S.A. ZIP: 02110
                                                                                                                                                                                                                                                                           STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                    CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 408 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 315,342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990 APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 18-OCT APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/10321799
No. US20030224996A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, ENGIN
OZKAYNAK, ENGIN
THANGAVEL
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-SEP-1990
                                                                                                                                                                                                                                                                                                                                           HURWITZ & THIBEAULT
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                                                                                                                            Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 408;
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В

GENERAL

Matches

20;

INFORMATION

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SEQUENCE DESCRIPTION: SEQ ID NO: 15: US-10-321-799-15
                                 US-10-428-997A-15
Sequence 15, Application US/10428997A
Publication No. US20040077546A1
GENERAL INFORMATION:
                                                                                                                              RESULT 46
                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                363 INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-AN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
PILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-ADG-1990
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-ADG-1990
                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                           Similarity
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APPLICATION NUMBER: US 0
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: DIANA M. STEEL REGISTRATION NUMBER: 43,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: STK-001CP6C3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/422,699 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 0
FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH: 408 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPLICATION NUMBER: US 07/616,374 ILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LICATION NUMBER: US 07/660,162
ING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LICATION NUMBER: US 07/599,543
ING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ICATION NUMBER: US 07/483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATION NUMBER: US 07/315,342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATION NUMBER: US 07/600,024
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 14; 100.0%; Pred. No. 1.4e-06; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 07/179,406
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                                                                                                                                                                                                                                                                                                                                      Length 408;
                                                                                                                                                                                                                                                                                               Indels
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  TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/428,997A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS: ADDRESSE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/841,646
APPLICATION NUMBER: US 07/827,052
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-CAN-11992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/869,920
FILING DATE: 20-DAG-1990
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-DAG-1990
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-DAG-1990
                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 22-FBB-1990
APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OF INVENTION: OSTEOGENIC DEVICES R OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/957,425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U.S.A.
                                                                                                                                                                                                          FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US:0 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 23-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 18-OCT-1990
ABPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US
FILING DATE: 18-OCT-19:
APPLICATION NUMBER: US
                                                                                                                                                 REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US
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RUEGER, LA.
ROY H.L.
OSTEC
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                                                                                                                                                                                                                                                                                                                                                                    ON NUMBER: US
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                                                                                                                         48,645
BER: STK-015C1
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LENGTH: 408 amino acids

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RESULT 49
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US-10-367-094-175
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MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-10-428-997A-15
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US-10-367-094-171
                                                                                                                                                                                                                    APPLICANT: David W. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets in Cancer
FILE REPERENCE: 529452001500
CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 175
LENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: David W. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets in Cancer
FILE REFERENCE: 529452001500
CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 171
                                                                                                                  Matches
                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 175, Application US/10367094
Publication No. US20040170982A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local |
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Best Local
                                                                                                                                                                                                              TYPE: PRT
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                              382 INPETVPKPCCAPTQLNAIS 401
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                                                                                                                              Similarity
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                                                                            INPETVPKPCCAPTQLNAIS 20
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o. US20040170982A1
                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; ilarity 100.0%; Conservative 0
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                                                                                                          100.0%; Score 111; DB 16; 100.0%; Pred. No. 1.5e-06; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 15; 100.0%; Pred. No. 1.4e-06;
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Pred. No. 1.5e-06;
0; Mismatches 0;
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                                                                                                                                           Length 427;
                                                                                                             Indels
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Sequence 2, Application US/08822186
Publication No. US20010014662A1
GENERAL INFORMATION:
APPLICANT: RUEGER, David C.
APPLICANT: TUCKER, Marjorie M.
ITILE OF INVENTION: IMPROVED OSTE
ITILE OF INVENTION: OF USE THEREO;
ITILE OF INVENTION: OSTEOCHONDRAL
UNMBER OF SEQUENCES: 9
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NAME: VITO, CHRISTINE C
REGISTRATION NUMBER: 39,061
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELECHONE: (617) 248-7000
TELECAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                       Sequence:2, Application US/08937755
Publication No. US20020049159A1
GENERAL INFORMATION:
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                            TITLE OF INVENTION: ME
TITLE OF INVENTION: TR
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/822,186
FILING DATE:
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC-DOS/MS-DOS
COMPATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC
                                                           STATE: M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 45 CCCCITY: HOPKINTON
                                                                                                                   ADDRESSEE: PATENT ADMINISTRATOR,
ADDRESSEE: THIBEAULT, LLP
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: ami
                                                                                                    CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 431 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           386 INPETVPKPCCAPTQLNAIS 405
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                                               MA
USA
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                                                                                                                                                                                                                                                                           OPPERMANN, HERMANN PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 8; Length 431; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                 CHARLES M.

: METHODS AND COMPOSITIONS FOR THE

: TREATMENT OF MOTOR NEURON INJURY AND NEUROPATHY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET
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Marjorie M.

Marjorie M.

IMPROVED OSTEOGENIC DEVICES AND METHODS
OF USE THEREOF FOR REPAIR OF ENDOCHONDRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OSTEOCHONDRAL DEFECTS
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                                                                                                                                                            TESTA, HURWITZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR REPAIR OF ENDOCHONDRAL BONE AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/08957425
Publication No. US20030069401A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, V CURRENT APPLICATION NUMBER: US/08/007 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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ATTORNEY AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid TOPOLOGY: linear
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                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <URKnown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                    APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
                                                                                                                                        FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: TESTA, HURWITZ & THIBEAULT STREET: 53 STATE STREET
                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/447,570
APPLICATION NUMBER: US 616,374
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 8; Length 431; 100.0%; Pred. No. 1.5e~06; ative 0; Mismatches 0; Indels
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TYPE: amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-08-957-425-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-260-675-17
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
               COUNTRY: USA
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
                                                                                                                                                                                                                                                                                                          APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES N
TITLE OF INVENTION: MORPHOC
TITLE OF INVENTION: REPAIR
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA HUR
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                                                                                                                                                                                                                           CITY: BOSTON
  FILING DATE:
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FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
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REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-001CP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 483,913
FILING DATE: 22-PEB-1990
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
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FILING DATE: 18-OCT 1990
APPLICATION NUMBER: US 599,543
FILING DATE: 18-OCT 1990
APPLICATION NUMBER: US 579,865
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/08260675
70. US20030104993A1
                                                                                                                                                                                                                                                    55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                      OZKAYNAK, ENGIN
PANG, ROY HL
COHEN, CHARLES M
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                                                                                                                                                                                                                                                                    HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                       MORPHOGEN-INDUCED NERVE REGENERATION AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-1990
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Patent No. US20010016646A1
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Best Local
ATTORNEY/AGENT INFORMATION:
NAME: VITO, CHRISTINE C
REGISTRATION NUMBER: 39,061
REFERENCE/DOCKET NUMBER: CRP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 17: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPUTER:
COMPUTER: IBM PC COMPUTER:
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURENT APPLICATION DATA:
APPLICATION NUMBER: US/09/045,331
FILING DATE:
CLASSIFICATION:
                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: RUEGER, David C.
APPLICANT: TUCKER, Marjorie M.
TITLE OF INVENTION: IMPROVED OSTEOGENIC DEVICES AND METHODS
TITLE OF INVENTION: OF USE THEREOF FOR REPAIR OF ENDOCHONDRAL BONE AND
TITLE OF INVENTION: OSTEOCHONDRAL DEFECTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 0:
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
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ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                       ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET:
                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
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REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
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TOPOLOGY: linear
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45 SOUTH STREET
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                                           CRP-137
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Pred. No. 1.5e-06;
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US-09-828-607-2
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APPLICANT: STRYKER CORPORATION
TITLE OF INVENTION: REPAIR OF LARYNX, TRACHEA; AND OTHER FIBROCARTILAGINOUS
TITLE OF INVENTION: TISSUES
FILE REPERENCE: STK-070 PCT
CURRENT FILING DATE: 2001-04-06
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09887901 Publication No. US20020091077A1
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LENGTH: 431
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Best Local Similarity 100.0%; Pred. No. 1.5e-06;
Matches 20; Conservative 0; Mismatches 0;
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 2:
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                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: James F. Haley,
                                                                                                                                                                                                                                                                                                                                       APPLICANI: NUMBER, MAXJORIE M
TUCKER, MAXJORIE M
TITLE OF INVENTION: MATRIX-FREE OSTEOGENIC DEVICES, IMPLANTS AND
METHODS OF USE THEREOF
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                     AL INFORMATION:
APPLICANT: RUEGER, David C
TUCKER, Marjork
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386 INPETVPKPCCAPTQLNAIS 405
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              APPLICATION NUMBER: US/09/887,901 FILING DATE: 22-Jun-2001 CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                      STATE: New York
                                                                                                                                                                                                   ZIP: 10020
                                                                                                                                                                                                                   COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 9; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
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Americas
                                                                                                Version
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; ORGANISM: Homo sapiens
US-09-982-543A-10
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Best Local S
Matches 20
                                                                                                                                 Sequence 2, Application US/09039107
Publication No. US20030032586A1
GENERAL INFORMATION:
APPLICANT: David C. Rueger and I
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GENERAL INFORMATION:
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FILE REFERENCE: CIBT-P04-543
CURRENT APPLICATION NUMBER: US/09/982,543A
CURRENT FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 08/448,371
PRIOR FILING DATE: 1995-06-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dijke, P.
APPLICANT: Miyazano, K.
APPLICANT: Sampath, K.
APPLICANT: Sampath, K.
APPLICANT: Heldin, C.
TITLE OF INVENTION: MORPHOGENIC PROTEIN-SPECIFIC CELL SURFACE RECEPTORS AND USES
TITLE OF INVENTION: THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 15
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TELEPAX: (212)596-9090
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431
                                                                          APPLICANT: David C. Rueger and Marjorie M. Tucker
TITLE OF INVENTION: COMPOSITIONS FOR MCRPHOGEN-INDUCED
TITLE OF INVENTION: OSTEOGENESIS
NUMBER OF SEQUENCES: 9
                                                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                     ADDRESSEE:
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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: CRP-147
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
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NEW YORK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 09/019,339 FILING DATE: <Unknown>
                 1250 AVENUE OF THE AMERICAS
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100.0%; Pred. No. 1.5e-06;
cive 0; Mismatches 0;
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Sequence 1, Application US/09798518

Publication No. US20030049328A1

GENERAL INFORMATION:
APPLICANT: DAIAL, PARRSH S.
APPLICANT: DIMAANO, GODOFREDO R.
APPLICANT: TOTH, CARCH ANN
APPLICANT: TOTH, CARCH AND
APPLICANTION: FOR PRODUCING SAME
ITITLE OF INVENTION: FOR PRODUCING SAME
FILE REFERENCE: STK-8
CURRENT APPLICATION NUMBER: US/09/798,518
CURRENT FILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PACENTIN Ver. 2.1
SEQ ID NO 11
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                                                                             Matches
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Best Local
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Best Local Similarity
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION UNBER: US/09/039,107
FILING DATE: 14
ATTORNEY/AGENT INFORMATION:
APPLICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELERHONE: (212) 596-9900
TELERAX: (212) 596-9990
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                            LENGTH: 431
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acids
TOPOLOGY: line
VOLECUT P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Z. YING L.
REGISTRATION NUMBER: 42,800
REFERENCE/DOCKET NUMBER: STY
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U
386 INPETVPKPCCAPTQLNAIS 405
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                              1 INPETVPKPCCAPTQLNAIS 20
                                                                           l Similarity
20; Conserv
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                                                                           100.0%; Score 111; DB 10; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
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Pred. No. 1.5e-06;
); Mismatches 0;
                                                                                                                  Length 431;
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US-09-540-466-2

Sequence 2, Application US/09540466 Publication No. US20030104977A1 GENERAL INFORMATION:

APPLICANT: RIPAMONTI, UGO

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US-09-012-846-2
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LENGTH: 431
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Best Local S
Matches 20
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Publication No. US20030170213A1
GENERAL INFORMATION:
APPLICANT: Marc F. Charette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: RAMOSHEBI, LENTSHA N.
TITLE OF INVENTION: METHODS FOR INDUCING ANGIOGENESIS USING MORPHOGENIC TITLE OF INVENTION: PROTEINS AND STIMULATORY FACTORS FILE REFERENCE: STK-6
CURRENT PAPLICATION NUMBER: US/09/540,466
CURRENT FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: Seq. Listing For CBM-70 1
CURRENT APPLICATION NUMBER: US/09/423,943
CURRENT FILING DATE: 2000-03-18
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NERAL INFORMATION.
EPHICANT: Sampath, Kuber T.
EPHICANT: Sampath, Kuber T.
EPHICANT: Cohen, Charles M.
FITLE OF INVENTION: Methods For Tissue Morphogenesis and Methods for FITLE OF INVENTION: Evaluating Morphogenic Activity
FITLE OF INVENTION: Seq. Listing For CBM-70 WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431
TYPE: PRT
ORGANISM: Homo sapiens
COMPUTER READABLE FORM:
MEDITY TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                  APPLICANT: Marc F. Charette
TITLE OF INVENTION: Methods and Compositions for
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local b.
                                                                                                                                                           STREET: 45 SOUTH
                                                                                                                       COUNTRY:
                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                   386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                             E: CREATIVE BIOMOLECULES, INC
45 SOUTH STREET
                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 10; dlarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatchen
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US-09-952-318A-17
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LENGTH: 431
TYPE: PRT
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                                                                                                                                                                           Sequence 17, Application US/09952318A Publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                Matches
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJU-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
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Best Local Similarity
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Publication No. US20030180376A1
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NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: STK-8 CIP
CURRENT APPLICATION NUMBER: US/09/960,789
CURRENT FILING DATE: 2001-09-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: TOTH, CAROL ANN
APPLICANT: KULKARNI, SHAILESH C.
TITLE OF INVENTION: POROUS BETA-TRICALCIUM PHOSPHATE GRANULES AND METHODS
TITLE OF INVENTION: FOR PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: DALAL, APPLICANT: DIMAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/798,518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Thomas C. Meyers
REGISTRATION NUMBER:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                           386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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10, GODOFREDO R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 111; DB 10; 100.0%; Pred. No. 1.5e-06; rative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                           0;
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                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 10;
Pred. No. 1.5e-06;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 431;
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RESULT 64
US-10-062-370-5
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, MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-062-370-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-952-318A-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/828,281
APPLICATION NUMBER: 1997-MAR-21
FILING DATE: 1997-MAR-21
ATTORNEY/AGENT INFORMATION:
NAME: FENTON, GILLIAN M
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-069CP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPHONE: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/10062370 Publication No. US20030022830A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR FILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR FILING DATE: 1991-08-30
PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 431
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match 100.0%; Score 111; DB 10;
Local Similarity 100.0%; Pred. No. 1.5e-06;
les 20; Conservative 0; Mismatches 0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/432,883
FILING DATE: 1995-05-02
APPLICATION NUMBER: 08/115,914
                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARBE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA: Release #1.0, Version #1.30
APPLICATION NUMBER: US/10/062,370
APPLICATION NUMBER: US/10/062,370
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 01748

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: CHARETTE, Marc F.
FINKLESTEIN, Seth P.
TITLE OF INVENTION: METHODS FOR ENHANCING FUNCTIONAL
RECOVERY FOLLOWING CENTRAL NERVOUS SYSTEM ISCHEMIA OR
                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: HOPKINTON STATE: MA
                                                            TOPOLOGY: linear
                                                                                    LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TRAUMA
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                                                                                           US-10-122-026-2
; Sequence 2, Application US/10122026
; Publication No. US20030105004A1
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                                                                                                                                                             RESULT 66
                                                                        GENERAL
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US-10-083-825-2
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                                                                                                                                                                                                                                                APPLICATION NUMBER: 08/459,129
APPLICATION NUMBER: 08/459,129
ATTORNEY/AGENT INFORMATION:
NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-101
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local S
                                                                   Matches
                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Pateentin Release #1.0, Version

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: MANUFACTURE OF AUTOGENOUS REPLACEMENT BODY PARTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: KHOURI, ROGER K. SAMPATH, KUBER T. RUEGER, DAVID C.
                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCE:
CORRESPONDENCE ADDRESS:
TESTA, HURWITZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386 INPETVPKPCCAPTQLNAIS 405
386 INPETVPKPCCAPTQLNAIS 405
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                               1 INPETVPKPCCAPTQLNAIS
                                                                     20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/10/083,825 FILING DATE: 27-Feb-2002 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                               LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: TESTA, HURWI'STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; ilarity 100.0%; Conservative 0;
                                                                   100.0%; Score 111; DB 14; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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Pred. No. 1.5e-06;
No. Mismatches 0;
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                                                                                                        Length 431;
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                                                                       Gaps
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JONES, WILLIAM K TUCKER, RONALD F RUEGER, DAVID C OPPERMANN, HERMANN

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RESULT 67
US-10-272-503-2
                                                                                                                                                                                                                                                                                                                                                                       US-10-122-026-2
                   Sequence 2, Application US/10272503
Publication No. US20030103445A1
GENERAL INFORMATION:
APPLICANT: RUGGER, DAVID C.
SAMPATH, KUBER T.
                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: CAMACHO, JENNIFER A.
REGISTRATION NUMBER: 43,526
REFERENCE/DOCKET NUMBER: STK-060CN
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-LOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/667,274 FILING DATE: 11-MAR-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                         386
                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                              1 INPETVEKECCAPTQLNAIS 20
                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/923,780 FILING DATE: 31-UUL-1992 APPLICATION NUMBER: US 07/752,857 FILING DATE: 30-AUG-1991 FILING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/10/122,026
FILING DATE: 29-Aug-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
APPLICATION NUMBER: US 07/938,336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 125 HIGH STREET CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SPONDENCE ADDRESS:
ADDRESSEE: Patent Administrator,
Thibeault, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/840,510 FILING DATE: 31-MAR-1993 APPLICATION NUMBER: US 08/029,335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/971,091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/402,542 FILING DATE: 13-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-NOV-1992
                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                           Score 111; DB 14;
Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                              DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Testa, Hurwitz &
                                                                                                                                                                                                                                                                                                                          Length 431;
                                                                                                                                                                                                                                                                                       Indels
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US-10-050-050-17
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                     Sequence 17, Application US/10050050 Publication No. US20030125230A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Ve

CURRENT APPLICATION DATA:

APPLICATION UNMBER: US/10/272,503

FILING DATE: 16-Oct-2002

CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                                                                     APPLICANT: COHEN, CHARLES M.
CHARETE, MARC F.
CHAREATE, MARC F.
KUBERSASMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/938,622
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRP-128
                                                                                                                                                              TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR,
THIBBAULT, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PANG, ROY H.L.
COHEN, CHARLES M.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE
TREATMENT AND PREVENTION OF PARKINSON'S DISEASE
                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                l Similarity
20; Conserv
CITY: HOPKINTON
STATE: MA
COUNTRY: USA
ZIP: 01748
                                                                                ADDRESSEE: PATENT ADMIN
STREET: 45 SOUTH STREET
                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 02110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 125 HIGH STREET CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (617)
TELEFAX: (617) 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 14; llarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                     OPPERMANN, HERMANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                     ADMINISTRATOR, CREATIVE BIOMOLECULES
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RESULT 70
US-10-301-822-10
; Sequence 10, Application US/10301822
; Publication No. US20030148410A1
                                                                                                                                                                                                                                                                  ; LENGTH: 431
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-286-152A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-286-152A-8
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                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/286,152A
CURRENT FILING DATE: 2002-02-28
NUMBER OF SEQ ID NOS: 54
SOFTWARE: Patentin version 3.1
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8, Application US/10286152A Publication No. US20030134308A1 GENERAL INFORMATION:
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Bone Morphogenic Proteins (BMP), BMP Receptors and BMP Binding PT TITLE OF INVENTION: and Their Use in the Diagnosis and Treatment of Glaucoma FILE REFERENCE: 2312 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Alcon Research, Ltd. APPLICANT: Clark, Abbot F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION: <Unknown>
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
FILING DATE: <Unknown>
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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LENGTH: 431 amino acids
TYPE: amino acid
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REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
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20; Conserv
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                                                                                                                INPETVEKECCAPTOLNAIS 405
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                                                                                                                                                                                          100.0%; Score 111; DB 14; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 14; llarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
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                                             Sequence 2, Application US/10321799
Publication No. US20030224996A1
GENERAL INFORMATION:
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                          APPLICANT:
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        OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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KUBERASAMPATH, THANGAVEL

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PRIOR APPLICATION NUMBER: US 60/339,971
PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR FILING DATE: 2002-03-05
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
LENGTH: 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT; ORGANISM: Homo Sapiens
US-10-301-822-10
                                                                                                                                                                                                                                                                                                                                                               Sequence 39, Application US/10366345
Publication No. US20030224501A1
GENERAL INFORMATION:
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
                                                                                                                                                                                     SOFTWARE: PatentIn version 3.2
SEO ID NO 39
SEO ID NO 39
SEO ID NO 39
SENGTH 431
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                     Query Match 100.0%;
Best Local Similarity 100.0%;
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Best Local Similarity
                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: BUTGATT, LAWFENCE J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029PZRNM
CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
CURRENT FILING DATE: 2002-11-21
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386 INPETVPKPCCAPTOLNAIS
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Monahan, John E.
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No. US20030224501A1
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                                                                                  Conservative
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100.0%; Pred. No. 1
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Pred. No. :
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                                                                                    Mismatches
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thes 0;
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INFORMATION FOR SEQ ID NO: 2
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ATTORNEY/AGENT INF
                                                                           REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: TESTA, HURWI'
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NT APPLICATION DATA:
APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
                                          TELEFAX: 617/248-7100
                                                                                                                                         NAME: DIANA M.
                                                              TELEPHONE:
                                                                                                                                                                                    APPLICATION NUMBER: US 07/422,623 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                            FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 1990
FILING DATE: 4-DEC-1990
FOR TOATTON NUMBER: US 07/810,560
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FILING DATE: 21-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/422,613
                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
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OF INVENTION: OSTEOGENIC DEVICES
R OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/569,920 PILING DATE: 20-AUG-1990
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CHARACTERISTICS:
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                                                                                                                                                                   INFORMATION:
                                                              617/248-7000
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UMBER - ...
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APPLICANT: WALSON, SUSANR.
APPLICANT: WESON, SUSANR.
APPLICANT: EOS BIOTECHNOLOGY, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, Composit.
TITLE OF INVENTION: Methods of Screening for Modulators of OFFILE REFERENCE: 018501-012500US
CURRENT APPLICATION NUMBER: US(10/295,027)
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: US 60/330,666
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/350,466
PRIOR FILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-11-15
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-21
PRIOR PRIOR DATE: 2001-11-21
PRIOR PRIOR DATE: 2001-11-21
PRIOR FILING DATE: 2001-11-14
PRIOR FILING DATE: 2001-12-14
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US-10-295-027-518
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LENGTH: 431
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                  Remaining Prior Application data removed
NUMBER OF SEQ ID NOS: 1386
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 60/356,714
PRIOR FILING DATE: 2002-02-13
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                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/355,250
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APPLICATION NUMBER: US 60/347,349
FILING DATE: 2002-01-10
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TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                         386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
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                                                                                                                        Similarity
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                       INPETVEKECCAPTQLNAIS 405
                                                         INPETVPKPCCAPTQLNAIS 20
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Hevezi, Peter A
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5. US20030232350A1
                                                                                                  100.0%; ilarity 100.0%; Conservative
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Pred. No. 1.5
0; Mismatches
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Pred. No. 1.5e-06;
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1.5e-06;
es 0;
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SEQUENCE

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1386
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                            Sequence 806, P
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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APPLICANT: Watson, Susan R.
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer,
TITLE OF INVENTION: Methods of Screening for Modula
FILE REFERENCE: 018501-012500US
CURRENT APPLICATION NUMBER: US/10/295,027
CURRENT FILING DATE: 2002-11-13
CURRENT FILING DATE: 2002-11-13
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PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-21
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APPLICANT: Aziz, Natas
APPLICANT: Ginsberg, W
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APPLICATION NUMBER: US 60/347,349
FILING DATE: 2002-01-10
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APPLICATION NUMBER: US 60/334,393
FILING DATE: 2001-11-29
APPLICATION NUMBER: US 60/340,376
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APPLICATION NUMBER: US 60/347,211
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Hevezi, Peter A.
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                                                                    Glynne, Richard
Hevezi, Peter A.
Mack, David H.
Murray, Richard
Watson, Susan R.
Eos Biotechnology,
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b. US20030232350A1
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o. US20030232350A1
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-295-027-806
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  CURRENT APPLICATION NUMBER: US/10/295,027
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: US 09/663,733
PRIOR FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR APPLICATION NUMBER: US 60/334,393
PRIOR FILING DATE: 2001-11-29
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Afar, Daniel
APPLICANT: Aziz, Natash
APPLICANT: Ginsberg, Wer
APPLICANT: Gish, Kurt C
APPLICANT: Glynne, Rich
APPLICANT: Hevezi, Petei
APPLICANT: Mack, David I
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Best Local
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TITLE OF INVENTION: Methods of Diagnosis of
TITLE OF INVENTION: Methods of Screening for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
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Hevezi, Peter A.
Mack, David H.
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Watson, Susan R.
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o. US20030232350A1
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of Cancer, Compositions and for Modulators of Cancer

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TITLE OF INVENTION: Methods of Diagnosis of Cancer, TITLE OF INVENTION: Methods of Screening for Modul FILE REFERENCE: 018501-012500US
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                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2002-02-13
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PRIOR APPLICATION NUMBER: US 60/356,714
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PRIOR APPLICATION NUMBER: US 60/335,394
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APPLICATION NUMBER: US 60/334,393
FILING DATE: 2001-11-29
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APPLICATION NUMBER: US 60/347,211
FILING DATE: 2002-01-08
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                                cn 100.0%;
l Similarity 100.0%;
20; Conservative 0.
INPETVEKECCAPTOLNAIS
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                                                             Score 111;
Pred. No. 1
20
                                             Mismatches
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                                                             DB 14;
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; MOLECULE TYPE: protein US-10-375-150-6
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US-10-295-027-843
Query Match
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Best Local Similarity
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                                                                                                                                              TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO: 6:
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PRIOR APPLICATION NUMBER: US 60/347,349
PRIOR FILING DATE: 2002-01-10
PRIOR APPLICATION NUMBER: US 60/355,250
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 60/356,714
PRIOR FILING DATE: 2002-02-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         squence 6, Application US/10375150 blication No. US20030235888A1
                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: GI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/375,150
                                                                                                                             SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER:
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                                                                          TOPOLOGY:
                                                                                         TYPE:
                                                                                                                                                                                                                                  NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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                                                                                                           ENGTH:
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                                                                                       : 431 amino acids amino acid
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87 CambridgePark Drive
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Wolfman, Neil
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100.0%;
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Pred. No. 1.5e-06;
Nismatches 0;
Score 111;
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DB 14;
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US-10-173-999-58
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                                                        CURRENT FILING DATE: 2003-05-01
PRIOR APPLICATION NUMBER: 09/96645
PRIOR APPLICATION NUMBER: 09/544511
PRIOR APPLICATION NUMBER: 09/544511
PRIOR APPLICATION NUMBER: 09/54511
PRIOR APPLICATION NUMBER: 60/128514
PRIOR APPLICATION NUMBER: 09/569269
PRIOR APPLICATION NUMBER: 09/569269
PRIOR APPLICATION NUMBER: 60/134315
PRIOR APPLICATION NUMBER: 60/134315
PRIOR APPLICATION NUMBER: 09/61925
PRIOR APPLICATION NUMBER: 09/789390
PRIOR APPLICATION NUMBER: 09/789390
PRIOR APPLICATION NUMBER: 09/789390
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US-10-173-999-58
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CURRENT APPLICATION NUMBER: US/10/173,999
CURRENT FILING DATE: 2002-06-17
PRIOR APPLICATION NUMBER: US 60/299,234
PRIOR FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: US 60/315,287
PRIOR FILING DATE: 2001-08-27
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/372,246
PRIOR APPLICATION NUMBER: US 60/372,246
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LENGTH: 431
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Publication No. US20040067505A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local s
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APPLICANT: Mack, Daviu ...
APPLICANT: Gish, Kurt C.
APPLICANT: Eos Biotechnology, Inc.
APPLICANT: For Biotechnology and Diagnosis of Ovarian
APPLICANT: Sand Methods of Screening for Mc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 58, A Publication No
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -10-428-275-6
                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 21402-585
CURRENT APPLICATION NUMBER: US/10/428,275
CURRENT FILING DATE: 2003-05-01
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Alvarez et al.
TITHE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2001-04-12
NUMBER OF SEQ ID NOS: 163
APPLICATION NUMBER: 60/185548 FILING DATE: 2000-02-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
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Pred. No. 1.5e-06;
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); Mismatches 0;
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RESULT 80
US-10-428-997A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/10428997A Publication No. US20040077546A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 450
SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 6
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, VOCURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/428,997A
FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: <Unknown> PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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                                                                                                                                      APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
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                                                         APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-CCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-CCT-1990
                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-ZAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/957,425
FILING DATE: 24-CCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                       APPLICATION NUMBER: US 07/616,374 FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: BOSTON
    APPLICATION NUMBER: US 07/483,913
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/147,023 FILING DATE: 1-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U.S.A.
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; Sequence 1, Application US/10290554 ; Publication No. US20040093164A1 ; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 431 amino acids; TYPE: amino acid; ; TOPOLOGY: Ilnear; ; MOLECULE TYPE: protein; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-428-997A-2
                                                              US-10-290-554-1
                                                                                 RESULT 82
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                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens US-10-302-812-28
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US-10-302-812-28
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Best Local S
Matches 20
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SEQ ID NO 28
LENGTH: 431
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
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REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                        386 INPETVPKPCCAPTOLNAIS 405
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APPLICATION NUMBER: US 07/179,406
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Sequence 28, Application US/10302812
Publication No. US20040087016A1
GENERAL INFORMATION:
APPLICANT: Keating et al.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR CELL DEDIFFERENTIATION AND TITLE OF INVENTION: TISSUE REGENERATION
FILE REPERENCE: HYDR-P02-004
CURRENT APPLICATION NUMBER: US/10/302,812
CURRENT FILING DATE: 2002-11-21
NUMBER OF SEQ ID NOS: 78
NUMBER OF SEQ ID NOS: 78
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APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: BRIAN FAIRCHILD
NAME: BRIAN FAIRCHILD
Score 111; DB 15;
Pred. No. 1.5e-06;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 15;
Pred. No. 1.5e-06;
Mismatches 0;
                                                           Length 431;
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FILE REFERENCE: STK-4

CURRENT APPLICATION NUMBER: US/10/753,916

CURRENT FILING DATE: 2004-01-07

PRIOR APPLICATION NUMBER: US/09/672,224A

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: 60/156,261

PRIOR FILING DATE: 1999-09-27

NUMBER OF SEQ ID NOS: 14

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 2
                                                                                                                                                                                                                                                                RESULT 84
US-09-361-741-3
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US-10-753-916-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
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APPLICANT: YEH, LEE-CHUAN C.

TITLE OF INVENTION: COMPOSITIONS AND THERAPEUTIC METHODS USING MORPHOGENIC TITLE OF INVENTION: PROTEINS, HORMONES AND HORMONE RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/290,554
CURRENT FILING DATE: 2002-11-08
NUMBER OF SEQ ID NOS: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: COMPUTER SYSTEM AND METHODS FOR PRODUCING MORPHOGEN TITLE OF INVENTION: ANALOGS OF HUMAN TDF-1
FILE REFERENCE: 24661-501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Carlson, William D
APPLICANT: Keck, Peter C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
                          APPLICANT: HE, WEI WU
TITLE OF INVENTION: PROSTATIC GROWTH FACTOR
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI,
ADDRESSEE: STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
                                                                                                                                                                    APPLICANT:
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STREET: 6 L.
STREET: 6 L.
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1 Similarity 100.0%;
20; Conservation
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                                                                                                                                                                  HUDSON, PETER L
ROSEN, CRAIG A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; ilarity 100.0%; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 16;
Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 111; DB 15;
Pred. No. 1.5e-06;
D; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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APPLICANT: HUGSON, et al.
APPLICANT: HUGSON, et al.
FILE REFERENCE: PP149D2
CURRENT APPLICATION UNMBER: US/10/270,377
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: 09/361,741
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: 09/461,418
PRIOR APPLICATION NUMBER: 09/461,418
PRIOR APPLICATION NUMBER: 09/411,607
PRIOR FILING DATE: 1999-11-18
PRIOR FILING DATE: 1995-04-11
PRIOR FILING DATE: 1995-04-11
PRIOR FILING DATE: 1995-04-11
PRIOR FILING DATE: 1994-12-15
NUMBER OF SEQ ID NOS: 10
SEQ ID NO 3
1-ENGTH: 432
  8
                                                                                                                                                         ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-270-377-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 85
US-10-270-377-3
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                                                                           Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/10270377 Publication No. US20030059431A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (201)994-1700
TELEFAX: (201) 994-1744
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIF: 07068
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 100.0%; Score 111; DB 9; Local Similarity 100.0%; Pred. No. 1.5e-06; les 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: US
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387 INPETVPKPCCAPTQLNAIS 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTOLNAIS 20
                                     INPETVPKPCCAPTQLNAIS 20
                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                בא: single
linear
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                                                                                              100.0%; Score 111; 100.0%; Pred. No. 1
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                                                                           0; Mismatches
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                                                                                                1.5e-06
                                                                                                                 DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 432;
                                                                                                                 Length 432;
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                                                                         Gaps
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Sequence 13, Applicati
Publication No. US2003
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                              TELEPHONE: 617/248-7000
                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/957,425 FILING DATE: 24-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-FEB-1992 APPLICATION NUMBER: US 810,560 APPLICATION NUMBER: US 810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08957425 vo. US20030069401A1
                                                                                                                                     NAME: PITCHER, EDMUNI REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION DATA:
                                                                                                                                                                                          APPLICATION NUMBER: US 179,460 FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                         TELEFAX: 617/248-7100
                                                                                                                   REFERENCE/DOCKET NUMBER: CRP-001CP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OF INVENTION: OSTEOGENIC DEVICES OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                          PPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                     PLICATION NUMBER
                                                                                                                                                                                                                                 PLICATION NUMBER:
LING DATE: 15-AUG
                                                                                                                                                                                                                                                                        LING DATE:
                                                                                                                                                                                                                                                                                         LING DATE: 17-OCT-1989
PLICATION NUMBER: US 315,342
                                                                                                                                                                                                                                                                                                                                                LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATION NUMBER: US 660, 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATION NUMBER: US 599,543
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-NOV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-1990
                                                                                                                               , EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8-OCT-1990
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                                                                                                                                                                                                                                                    US 232,630
                                                                                                                                                                                                                                                                                                                                                                 US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                            US 569,920
                                                                                                                                                                                                                                                                                                                                US 422,613
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PRIOR APPLICATION DATA

APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052

FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920

PPLICATION NUMBER: US 07/810,560 ILING DATE: 20-DEC-1991

PPLICATION NUMBER: US 07/600,024

PLICATION NUMBER: US 07/599,543

ILING DATE: 18-OCT-1990
PPLICATION NUMBER: US 07/616,374

NUMBER: US 07/179,406 08-APR-1988

APPLICATION NUMBER: US (

US 07/621,988 US 07/621,849

ILING DATE: 7-SEP-1990
PPLICATION NUMBER: US (
TLING DATE: 4-DEC-1990

PPLICATION NUMBER: US 07/579,865

ING DATE:

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TOPOLOGY: linear;
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-08-957-425-13
US-10-321-799-13
                                                                                                   Matches
                                                                                                                          Query Match
                                                                                                               Local
                                                  439 INPETVPKPCCAPTQLNAIS 458
                                                                                                   20;
                                                                         1 INPETVPKPCCAPTQLNAIS 20
                                                                                                               Similarity
                                                                                                   100.0%; ilarity 100.0%; Conservative
                                                                                                     0,
                                                                                                     Score 111; DB 8;
Pred. No. 1.6e-06;
Mismatches 0;
                                                                                                                             Length 484;
                                                                                                        0
                                                                                                        0
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Sequence 13, Appublication No. ZIP: 02110
COMPUTER READABLE FORM:
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS/ CURRENT APPLICATION NUMBER: US/10/321,799
APPLICATION NUMBER: US/10/321,799 CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET APPLICANT: OPPERMANN, HERMI OZKAYNAK, ENGIN NUMBER OF SEQUENCES: TITLE OF INVENTION: OSTEOGENIC DEVICES INFORMATION CLASSIFICATION: <Unknown> FILING DATE: 17-Dec-2002 COUNTRY: U.S.A. STATE: MASSACHUSETTS Application US/10321799 US20030224996A1 KUBERASAMPATH, TO RUEGER, DAVID C. PatentIn Release #1.0, Version #1 ROY H. HERMANN THANGAVEL

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RESULT 88
US-10-428-997A-13
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13, Applicati
Publication No. US2004
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7100
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA;
                                                                                                                                                                                                   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/428,997A
FILING DATE: 02-May-2003
CINCTESTED OF MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: OPPERWANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-0CT-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     439 INPETVPKPCCAPTQLNAIS 458
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                     APPLICATION NUMBER: US 08/957,425
FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                         STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: BOSTON
                                                APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 15-AUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10428997A
No. US20040077546A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NPPLICATION NUMBER: US 07/315,342
"ILING DATE: 23 FEB-1989
"LING DATE: 22 FEB-1991
"LING DATE: 22 FEB-1991
NPPLICATION NUMBER: US 07/422,699
"ILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 14; llarity 100.0%; Pred. No. 1.6e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                         02110
      1-NOV-1993
WUMBER: US 07/841,646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER: US 07/232,630
15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 484;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                                                                                   Sequence 6, Application US/08260675 Publication No. US20030104993A1
                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                       GENERAL INFORMATION
APPLICANT: RUEGEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STK-015C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPHAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
APPLICANT: RÜEGER, DAVID C
APPLICANT: KÜBERASANPATH, THANGAVEL
APPLICANT: OPPERMANN, HERMANN
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: DANG, ROY HL
APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                     439 INPETVPKPCCAPTQLNAIS 458
                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 484 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: BRIAN FAIRCHILD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-0CT-1989
FILING DATE: 17-0CT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-CCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-CCT-1990
APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APP-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILLING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILLING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PLICATION NUMBER: US 07/660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPLICATION NUMBER: US 07/315,342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 15;
100.0%; Pred. No. 1.6e-06;
vative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 484;
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                                                                                                                                  Sequence 6, Application US/09952318A Publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local :
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METHACKIC BONE DISEASE
FILE REFERENCE: JJU-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/667,274
APPLICATION LARR-1991
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION UNMBER: US 07/752,764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS: LENGTH: 139 amino acids TYPE: amino acid STRANDENNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/126,100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSES: TESTA HURWITZ & THIBEAULT
STREET: 55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 55 ST
CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERAVING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE TYPE: EMBRYO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM:
                                                                                                                                                                                                                                                                                                                                                            19;
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                                                                                                                                                                                                                                                                                                    1 INPETVPKPCCAPTQLNAIS 20
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linear
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                                                                                                                                                                                                                                                                                                                                                                             97.3%;
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                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
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RESULT 91
US-10-050-050-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-10-13
PRIOR PILING DATE: 1995-05-02
PRIOR FILING DATE: 1995-05-02
PRIOR PAPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR PILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR PILING DATE: 1991-03-11
PRIOR PILING DATE: 1991-03-11
PRIOR PILING DATE: 1991-03-11
PRIOR PILING DATE: 1991-03-11
NUMBER OF SEO ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6, Application US/10050050 Publication No. US20030125230A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 6
LENGTH: 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 97.3%; Score 108; DB 10; Best Local Similarity 95.0%; Pred. No. 1.2e-06; Matches 19; Conservative 1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.1
TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 6:
                                                                      APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION: CUNHOWN>
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US/08/461,113
FILING DATE: CUNHOWN>
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORKEY/ACENT INFORMATION:
NAME: FENTON BEG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: COHEN, CHARLES M.
CHARETTE, MARC F.
CHARETTE, MARC F.
CHBERJSAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 INPUTVEKECCAPTOLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 139;
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RESULT 93
US-08-957-425-25
; Sequence 25, Application
; Publication No. US20030
; Publication No. US20030
; CENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: tissue type embryo MOP1-MATURE US-10-385-064-6
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US-10-385-064-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 6
LENGTH: 139
TYPE: PRT
ORGANISM: Murinae gen. sp.
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6, Application US/10385064 Publication No. US20040102373A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: CBM-2 DIV (00960-502 DI)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR APPLICATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Conen, Charles Thangavel
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
TITLE OF INVENTION: CRM-2 DIV (00960-502 DIV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Cohen, Charles M. APPLICANT: Kuberasampath, T
    CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                          PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                          APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Protein
LOCATION: 1.139
OTHER INFORMATION: /note= "MOP-1 (MATURE FORM)"
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                               94 INPDTVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94 INPDTVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                           l Similarity
19; Conserv
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                                                                                                                                                                                                                  Application US/08957425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                    KUBERASAMPATH, TI
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                       97.3%;
95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97.3%; Score 108; DB 14; 95.0%; Pred. No. 1.2e-06;
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Pred. No. 1.2e-06;
                                                                                                                                        THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 139;
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                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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RESULT 94
US-08-260-675-19
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TYPE: amino acids
i TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-08-957-425-25
  밁
                                                                             Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                 TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 25: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 2:
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 1:
FILING DATE: 08-APR-1988
ATTORNEY_AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: E17/248-7000
385 INPDTVPKPCCAPTQLNAIS 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
FILING DATE: 22-FEB-1991
                         INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                     NAME: PITCHER, EDMUND R. REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                           LENGTH: 430 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PPLICATION NUMBER: US 579,865 ILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ILING DATE: 04-DEC-1990 PPLICATION NUMBER: US 616,374 ILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: US 600,024 ILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LING DATE:
                                                                             Conservative
                                                                                            97.3%;
95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-OCT-1990
                                                                             ⊢
                                                                           Score 108; DB 8;
Pred. No. 3.6e-06;
1; Mismatches C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      179,460
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                                                                                                                                                                                25
                                                                                                                 Length 430;
                                                                           0;
                                                                         Gaps
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RESULT 95
US-09-952-318A-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPHAX: -617/248-7100
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 430 amino acids
Sequence 19, Application US/09952318A
Publication No. US20030224979A1
GENERAL INFORMATION:
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
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Publication No. US20030104993A1
GENERAL_INFORVATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE:
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: PANG, ROY HL
APPLICANT: COMEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 430 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: US
ZIP: 02140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
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                                                                                                                                                                                                                             385 INPUTVPKPCCAPTQLNAIS 404
                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                             19; Conservative
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55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RUEGER, DAVID C
KUBERASANPATH, THAN
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                           97.3%; Score 108; DB 8; 95.0%; Pred. No. 3.6e-06; tive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/260,675
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CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/70, 336
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432, 883
PRIOR APPLICATION NUMBER: 08/432, 883
PRIOR APPLICATION NUMBER: 08/115, 914
PRIOR FILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923, 780
PRIOR APPLICATION NUMBER: 07/752, 847
PRIOR APPLICATION NUMBER: 07/752, 847
PRIOR APPLICATION NUMBER: 07/752, 847
PRIOR APPLICATION NUMBER: 07/667, 274
PRIOR APPLICATION NUMBER: 07/667, 274
PRIOR FILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
SOPTWARE: PATENTIN VERSION 3.1
SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-952-318A-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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ORGANISM: Mus musculus
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                CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION UNMEER: US 08/402,542
PILING DATE: 13-MAR-1995
APPLICATION UNMEER: US 08/840,510
PILING DATE: 31-MAR-1993
APPLICATION NUMBER: US 08/029,335
PILING DATE: 04-MAR-1993
APPLICATION NUMBER: US 07/971,091
PILING DATE: 03-NOV-1992
APPLICATION NUMBER: US 07/9746,235
PRING DATE: 03-NOV-1992
APPLICATION NUMBER: US 07/946,235
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                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/122,026
FILING DATE: 29-Aug-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: JONES, WILLIAM K
TÜCKER, RONALD F
RÜGGER, DAVID C
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    385 INPDTVPKPCCAPTQLNAIS 404
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19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Patent Administrator, Testa, Hurwitz
FILING DATE: 16-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thibeault,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.3%; Score 108; DB 10; Length 430; 95.0%; Pred. No. 3.6e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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RESULT 97
US-10-050-050-19
; Sequence 19, Application US/10050050
; Publication No. US20030125230A1
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MOLECULE TYPE: Protein

SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-122-026-4
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Best Local Similarity
Marches 19; Conserve
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                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
FILING DATE: <UNKNOWN:
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PETENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR,
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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MATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 385 INPDTVPKPCCAPTQLNAIS 404
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                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/10/050,050 FILING DATE: 15-Jan-2002
NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
                                                                                                                                                                                                                                                                                                    CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: HOPKINTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 430 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/938,336 FILING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/923,780 "ILING DATE: 31-JUL-1992 "PPLICATION NUMBER: US 07/752,857 "ILING DATE: 30-AUG-1991 "PPLICATION NUMBER: US 07/752,764 "PPLICATION NUMBER: US 07/752,764 "PRICATION NUMBER: US 07/752, "PRICATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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SMART, JOE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPPERMANN, HERMANN PANG, ROY H.L. OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUBGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROLIFERATION OF : 33
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Pred. No. 3.6e-06;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EPITHELIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                   Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 430;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
PILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/10/321,799
FILING DATE: 17-Dec-2002
                                                 FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
APPLICATION NUMBER: US 07/569,920
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION UNMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: MASSACHUSETTS
                                                                                                                                                                                                                       ILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
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NUMBER: US 07/600,024 : 18-OCT-1990

US 07/621,988

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US-10-321-799-25; Sequence 25, Applicati
; Publication No. US2003
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 19: SEQUENCE CHARACTERISTICS:
              TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 3 CORRESPONDENCE ADDRESS: TESTA, HURWITZ & THIBEJ
                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                              APPLICANT: OPPERWANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUGGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                      385 INPUTVPKPCCAPTQLNAIS 404
                                                                                                                                                                                                                                                                                                                   1 INPETVEKECCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (508)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX:
                                                                                                                                                                                  Application US/10321799
No. US20030224996A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 430 amino acids
                                                                                                                                                                                                                                                                                                                                                        Conservative
125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                   97.3%;
95.0%;
                                                                                  ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08) 435-9001
) 435-6951
                HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                     Score 108; DB 14;
Pred. No. 3.6e-06;
                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                   Length 430;
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Gaps

LING DATE:

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LENGTH: 430 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-321-799-25
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FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: 43,153
FILING DATE: 17-OCT-1989
AFTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
TELECATION INFORMATION:
TELECATION STEAT ON TELECATION:
TELECATION STEAT ON THE STEAT OF T
SOFTWARE: Patentin Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/10/428,997A FILING DATE: 02-May-2003 CLASSIFICATION: <Unknown>PRIOR APPLICATION DATA:
                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       385 INPDTVPKPCCAPTQLNAIS 404
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APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
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FILING DATE: 22-FEB-199
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                       STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10428997A
O. US20040077546A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUBERASAMPATH, TI
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97.3%;
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Pred. No. 3.6e-06;
1; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
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SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-10-428-997A-25
                                                                                                                                RESULT 100
US-10-302-812-26
                                              Sequence 26, Application US/10302812 Publication No. US20040087016A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 19; Conserv
                    APPLICANT: Keating et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 25:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: BRIAN FAIRCHILD
REGISTRATION NUMBER: 48,6
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: BRIAN FAIRCHILD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                1 INPETVPKPCCAPTQLNAIS 20
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APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
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FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
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                                                                                                                                                                                                                                               INPOTVPKPCCAPTQLNAIS
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APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 430 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ILING DATE: 1-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/232,630 FILING DATE: 15-AUG-1988
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PPLICATION NUMBER: US 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: US 07/179,406
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TLING DATE: 21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                   97.3%;
                                                                                                                                                                                                                                                                                                                                                         1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                      Score 108; DB 15;
Pred. No. 3.6e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48,645
3ER: STK-015C1
                                                                                                                                                                                                                                                  404
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                                                                                                                                                                                                                                                                                                                                                                                                                Length 430;
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RESULT 99 US-10-428-997A-25

Sequence 25, Ap Publication No.

GENERAL INFORMATION: APPLICANT: OPPE

CITY: BOSTON

0

Query Match Best Local Similarity Matches 19; Conserva

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APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gomez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION UMMBER: US/09/784,911
CURRENT FILING DATE: 2001-09-17
NUMBER OF SEQ ID NOS: 30
SOFTWARE: Patentin version 2.1
SEQ ID NO 12
LENGTH: 433
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US-10-385-064-16
US-10-385-064-16
; Sequence 16, Application US/10385064
; Publication No. US20040102373A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT ; ORGANISM: Murinae gen. sp. US-10-385-064-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Kuberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CBM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1995-03-01
PRIOR FILING DATE: 1995-03-01
NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER: OS/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER: OS/396,684
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                                                                                                                                                                                                                                                                                                Sequence 12, Application US/09784911 Patent No. US20020072115A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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FILE REFERENCE: HYDR-P02-004
CURRENT APPLICATION NUMBER: US/10/302,812
CURRENT FILING DATE: 2002-11-21
NUMBER OF SEQ 1D NOS: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Cohen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          y Match 97.3%; Score 108; DB 15; Length 430; Local Similarity 95.0%; Pred. No. 3.6e-06; hes 19; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       385 INPUTVPKPCCAPTQLNAIS 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385 INPUTVPKPCCAPTQLNAIS 404
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
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Pred. No. 3.6e-06;
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                                                                                                                                 ; ORGANISM: Mus musculus US-10-367-094-168
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US-10-367-094-168
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: mouse US-09-784-911-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT; ORGANISM: mouse US-09-784-911-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 103
US-09-784-911-14
                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FAStSEQ for Windows Version 4.0
SEQ ID NO 168
LENGTH: 456
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: David w. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets in Cancer
FILE REFERENCE: 529452001500
                                                                  Matches
                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                       Sequence 168, Application US/10367094 Publication No. US20040170982A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn version 2.1
SEQ ID NO 14
LENGTH: 435
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION NUMBER: US/09/784,911
CURRENT FILING DATE: 2001-09-17
NUMBER OF SEQ ID NOS: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 14, Application UP Patent No. US20020072115A1
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Best Local
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411 INPDTVPKPCCAPTQLNAIS 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388 INPDTVPKPCCAPTQLNAIS 407
                                                                19;
                         1 INPETVPKPCCAPTQLNAIS 20
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19; Conservative
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                                                                Conservative
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                                                                             97.38;
95.08;
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95.0%;
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95.0%;
                                                             Score 108; DB 16; Length 456; Pred. No. 3.8e-06; Indels 1; Mismatches 0; Indels
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Pred. No. 3.6e-06;
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Pred. No. 3.7e-06;
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RESULT 105 US-10-122-026-14

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US-10-122-026-14
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                                                                                                                                                                                                                                                                                                                                                         NAME: CAMACHO, JENNIFER A.
REGISTRATION NUMBER: 43,526
REFERENCE/DOCKET NUMBER: STK-060CN
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/122,026
FILING DATE: 29-Aug-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 23 CORRESPONDENCE ADDRESS:
                                                                                                                                       LOCATION: 1..438
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                 MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: JONES, WILLIAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Thibeault, I
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Patent Administrator, Testa, Hurwitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/402,542
FILLING DATE: 13-MAR-1995
APPLICATION NUMBER: US 08/840,510
FILLING DATE: 31-MAR-1993
APPLICATION NUMBER: US 08/029,335
FILLING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
                                                                                                                                                                                                               NAME/KEY:
                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/752,857 FILING DATE: 30-AUG-1991
                                                                                                   AUTHORS: LYONS,
JOURNAL: Proc. Natl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PLICATION NUMBER: US 07/923,780
LING DATE: 31-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PLICATION NUMBER: US 07/946,235
LING DATE: 16-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LICATION NUMBER: US 07/938,336
ING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LICATION NUMBER: US 07/971,091
ING DATE: 03-NOV-1992
                    DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RUEGER, DAVID C
OPPERMANN. """
OZKA""
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                                                            4554-4558
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/029,386
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 29756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Penn, Sharron G.

APPLICANT: Rank, David K.

APPLICANT: Hanzel, David K.

TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: AEOMICA-X-2
                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-029-386-29756
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OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.6
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.91
OTHER INFORMATION: EXPRESSED IN LIVER, SIGNAL = 0.91
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 0.87
OTHER INFORMATION: SWISSPROT HIT: P20722, EVALUE 6.00e-24
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TYPE: PR
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                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                     APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                    APPLICANT:
                                    COUNTRY:
                                                                          CITY: BOSTON
                                                                                             STREET:
                                                                                                             DDRESSEE:
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02140
Q RF
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17; Conser
                                                                                                                                                       OF SEQUENCES:
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No. US20030104993A1
                                                                                               E: TESTA HURWITZ & THIBEAULT
55 STATE STREET
                                                                                                                                                                                                                                                OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                     KUBERASAMPATH,
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US20030194704A1
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85.0%; Pred. No. 1.3e-05;
tive 2; Mismatches 1
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Pred. No. 1.2e-05;
2; Mismatches 0;
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COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible

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PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
PRIOR FILING DATE: 1993-09-01
PRIOR FILING DATE: 1992-07-21
PRIOR FILING DATE: 1992-07-21
PRIOR FILING DATE: 1992-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-952-318A-13
                                                                                                                                                                                                                                                                                                                                                        Sequence 13, Application US/09952318A Publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                    FILE REFERENCE: JJJ-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
                                                                                                                                                                                                                                                                                                 APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS
TITLE OF INVENTION: METABOLIC BONE DISEASE
                                        PRIOR APPLICATION NUMBER: 07/752,847 PRIOR FILING DATE: 1991-08-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION UNMER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 07/752,764
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn CURRENT APPLICATION DA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
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APPLICATION NUMBER: 1
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
FILING DATE: 1991-08-30
APPLICATION NUMBER: 07/667,274
FILING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57 MNPEYVPKPCCAPTKLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity 85.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sss: single
linear
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85.0%;
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n Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "BMP6"
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Pred. No. 2.5e-05;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 102
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RESULT 110
US-10-050-050-28
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US-09-952-318A-28
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                                                                                                                                                                                                                    Sequence 28, Application US/10050050 Publication No. US20030125230A1
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
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publication No. US20030224979A1
GENERAL INFORMATION:
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: METAMENT TO PREVENT LOSS
TITLE OF INVENTION: METAMOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 07/923,780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 08/
PRIOR FILING DATE: 1993-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1991-08-30
                                                                                                                                                                                                          GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 102
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OR FILING DATE: 1992-07-31
OR APPLICATION NUMBER: 07/752,847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                         57 MNPEYVPKPCCAPTKLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102
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                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                 INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                 OPPERMANN, HERMANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                 COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THA
RUEGER, DAVID C.
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                         87.4%;
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85.0%;
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Pred. No. 2.
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76
                                                                                                                                                        THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 10;
2.5e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                             DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                             .5e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Length 102
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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ZIP: 01748 COMPUTER READABLE FORM:

STATE: MA

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 14; Length 102;
2.5e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                              APPLICANT: Bruce D. Weintraub
APPLICANT: Mariusz W. Szkudlinski
APPLICANT: University of Maryland
TITLE OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
FILS REPERENCE: UOPMD. 003C1
CURRENT APPLICATION NUMBER: US/09/813,398
CURRENT ETLING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: PCT/US99/05908
PRIOR APPLICATION NUMBER: PCT/US99/19772
PRIOR APPLICATION NUMBER: PCT/US98/19772
PRIOR FILING DATE: 1998-09-22
NUMBER OF SEQ ID NOS: 41
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 29
LENGTH: 112
B
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US-09-813-398-29
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                                                                                                                                                            US-09-813-398-29
                                                                           Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION UNMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-248-7000
TELEPAX: 617-248-7100
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 29, Application US/09813398 Patent No. US20020169292A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 87.4%;
Best Local Similarity 85.0%;
Matches 17; Conservative
                                                                                                                                                                                ORGANISM: HOMO SAPIEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/496,398
FILING DATE: 02-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 1..102
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/478,097 FILING DATE: 07-JUN-1995 CLASSIFICATION:
                                                                             Local Similarity 85.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 102 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57 MNPEYVPKPCCAPTKLNAIS 76
68 MNPEYVPKPCCAPTKLNAIS 87
                                1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                87.4%;
85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "BMP-6 SEQUENCE"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Score 97; DB
; Pred. No. 2.5e
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STK-059CN
                                                                               Score 97; DB 9;
Pred. No. 2.8e-05;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5e-05
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                                                                                                                   Length 112;
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                                                                                 Indels
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. NAME/KEY: Protein
; LOCATION: 1..102
; CTHER INFORMATION: /label= BMP6
; SEQUENCE DESCRIPTION: SEQ ID NO: 28:
US-10-050-050-28

FEATURE:

MOLECULE TYPE: protein

INFORMATION FOR SEQ ID NO: 28:

TELEPHONE:

E: (508) 435-9001 (508) 435-6951

SEQUENCE CHARACTERISTICS:

LENGTH: 102 amino acids
TYPE: amino acid STRANDEDNESS: single TOPOLOGY: linear

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
FILING DATE: «UNMBER: US 08/445,882
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:

APPLICATION NUMBER: US/10/050,050 FILING DATE: 15-Jan-2002 CLASSIFICATION: <Unknown>

NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:

US-10-187-394-14

Sequence 14, Application US/10187394
Publication No. US20030176667A1
GENERAL INFORMATION:

APPLICANT: KECK, PETER
APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINGLE CHAIN ANALOGS OF TGF-B
TITLE OF INVENTION: SUPERFAMILY (MORPHONS)
NUMBER OF SEQUENCES: 45

CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ
ADDRESSEE: THIBEAULT, LLP
STREET: 125 HIGH STREET

ADUNCTION STREET: BOSTON MA

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

COUNTRY: US ZIP: 02110

MA USA

0

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

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57 MNPEYVPKPCCAPTKLNAIS 76

1 INPETVPKPCCAPTQLNAIS 20

Matches Query Match Best Local

17;

Similarity

87.4%;

Score 97; DB Pred. No. 2.5e 2; Mismatches

2;

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RESULT 113
US-09-389-705-11
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US-10-115-406-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/153,733

FILING DATE: <UNKNOWN

ATTORNEY/AGENT INFORMATION:

NAME: WETHERELL, JR. Ph.D., JOHN R.

REGISTRATION NUMBER: 31,678

REFERENCE/DOCKET NUMBER: FD2279 PCT

TELECOMMUNICATION INFORMATION:

TELEPHONE: (619) 455-5110

INFORMATION FOR SEQ ID NO: 11:

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                     Sequence 9, Application US/10115406
Publication No. US20020127612A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 17; Conserv
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Publication No. US20010018509A1
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jún TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9 FILE REFERENCE: JHU1190-3 US/10/115,406 CURRENT APPLICATION NUMBER: US/10/115,406 CURRENT FILING DATE: 2002-04-02 PRIOR APPLICATION NUMBER: 09/301,520 PRIOR APPLICATION NUMBER: 09/301,520 PRIOR PILING DATE: 1999-04-28 PRIOR PILICATION NUMBER: US 09/172,062 PRIOR FILING DATE: 1998-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compartible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09/389,705
FILING DATE: 03-Sep-1999
CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: JOHNS HOPKINS UNIVERSITY TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3 NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                       73 MNPEYVPKPCCAPTKINAIS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                            1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 118 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Protein LOCATION: 1..118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
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Pred. No. 2.
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2.9e-05;
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, NAME/KBY: Protein
; LOCATION: 1..118
; SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-10-154-333-11
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US-10-154-333-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/10154333 Publication No. US20030109684A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR EILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                    TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

COPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/154,333

FILING DATE: 21-May-2002

CLASSIFICATION: CUNCHOMP

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: FD2279 PCT TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: <Unknown-
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3 NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: JOHNS HOPKINS UNIVERSITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 MNPEYVPKPCCAPTKLNAIS
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                                                                                                                    CLONE: Vgr-1
                                                                                                                                                                                                      STRANDEDNESS: single
                                                                                                                                                                                                                             LENGTH: 118 amino acids
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Pred. No. 2.9e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT ; ORGANISM: Mus musculus US-10-704-223-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR TILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR APPLICATION DATE: 1993-01-12
PRIOR FILING DATE: 1993-01-12
NUMBER OF STO. TO NOC. 20
                                                                                                                                                                                                                                                                                                                                      Sequence 12, Application US/09813459 Patent No. US20020107369A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 9, Application US/10704223 Publication No. US20040152143A1
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9 FILE REFERENCE: JHU1190-7 CURRENT APPLICATION NUMBER: US/10/704,223 CURRENT FILING DATE: 2003-11-07 PRIOR APPLICATION NUMBER: US 10/115,406 PRIOR FILING DATE: 2002-04-02 PRIOR APPLICATION NUMBER: US 09/301,520 PRIOR PILING DATE: 1099-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: THE JOHNS HOPKINS UNIVERSITY APPLICANT: LEE, Se-Jin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH:
                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                            TITLE OF INVENTION: GROWTH NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
ADDRESSEE: Spensle
                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 MNPEYVPKPCCAPTKLNAIS 92
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17; Conserv
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17; Conservative
                                                                                                                                                              ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
APPLICATION NUMBER: US/09/813,459
                                                                                                                                ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                  90067
                                                                                                                                                                                                                                                                                                                        Lee, Se-Jin
                                                                                                                                                  USA
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85.0%;
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; Pred. No. 2.9e
2; Mismatches
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Pred. No. 2.9e-05;
2; Mismatches 1
                                                                                                                                                                                                                                                                                  US20020107369A1een
DIFFERENTIATION FACTOR-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 14; Length 118;
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  Query Match
Best Local Similarity
Matches 17; Conserve
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                                                                                            US-09-859-211-39
                                                                                                                                                                    NUMBER OF SEQ ID NOS: 51
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 39, Application US/09859211 Patent No. US20020157125A1
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
PRIOR APPLICATION NUMBER: 09/019,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 08/033,923 PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 08/862,445
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/847,910
PRIOR FILING DATE: 1997-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1998-02-05
                                                                                                              TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (619) 41
INFORMATION FOR SEQ ID NO:
                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: 11:
MOLECULE TYPE: pri
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                  FILING DATE: 1995-10-26
APPLICATION NUMBER: PCT/US94/03019
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/795,071 FILING DATE: 1997-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., Ph.D.
REGISTRATION NUMBER: 31,678
                                                                                                                                                                                                                                                                FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/525,596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 MNPEYVPKPCCAPTKLNAIS 93
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                                                                                                                                                  119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 20-Mar-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 119 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: PD-3054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLONE: Vgr-1
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                      Conservative
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                                      87.4%;
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2; Mismatches
                    Score 97; DB 9;
Pred. No. 2.9e-05;
2; _Mismatches 1
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                                                          Length 119;
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RESULT 120
US-09-872-856-39
US-09-872-856-39
Sequence 39, Application US/09872856
Publication No. US20030074680A1
GENERAL INFORMATION:
APPLICANT: Johns Hopkins University School of Medicine
APPLICANT: Lee, Se-Uin
APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
FILE REFERENCE: JMU120-17
CURRENT APPLICATION NUMBER: US/09/872,856
CURRENT FILING DATE: 2001-06-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 119
US-09-880-708-17
; Sequence 17, Application US/09880708
; Patent No. US20020165361A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
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Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 619/677-1465
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR DATE: 12-Jun-2001

PRIOR APPLICATION UNMER: 09/145,060

FILING DATE: <Unknown
APPLICATION NUMBER: 08/003,144

FILING DATE: 12-Jun-1933

ATTORNEY/AGENT INFORMATION:
NAME: Lies A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347

REFERENCE/DOCKET NUMBER: 07265/057002

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/880,708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5 NUMBER OF SEQUENCES: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE DESCRIPTION: SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                               74 MNPEYVPKPCCAPTKLNAIS 93
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                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 119 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 858/677-1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92121-2189
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Pred. No. 2.9e-05;
2; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 119;
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RESULT 121
US-10-335-483-21
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PRIOR FILING DATE: 1997-02-05
PRIOR PELICATION NUMBER: US 08/525,596
PRIOR FILING DATE: 1995-10-25
PRIOR APPLICATION NUMBER: PCT/US 94/03019
PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21, Application US/10335483 Publication No. US20030120058A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Pa
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Best Local
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PRIOR APPLICATION NUMBER: US OPRIOR FILING DATE: 1997-04-28
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PRIOR FILING DATE: 1998-07-28
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: US 08/862,445
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TYPE: PRT
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         INFORMATION
PRICATION NUMBER: US/10/335,483
FILING DATE: 31-Dec-2002
CLASSIFICATION: <a href="Unknown">Unknown</a>
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/09/177,860
FILING DATE: <u href="Unknown">Unknown</a>
APPLICATION NUMBER: 08/525,596
FILING DATE: 19-SEP-1995
APPLICATION NUMBER: DCT/US94/07762
APPLICATION NUMBER: DCT/US94/07762
FILING DATE: 08-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., Ph.D, John R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
TELEPHONE: 619-678-5070
TELEPHONE: 619-678-5099
NFORMATION FOR SEQ ID NO: 21:
                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOPTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Huynh, Thanh
Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
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l Similarity 85.0%;
l7; Conservative
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STATE: CA
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Pred. No. 2.9e-05;
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; NAME/KEY: Protein
; LOCATION: 1..119
; SEQUENCE DESCRIPTION: SEQ ID NO: 21:
US-10-335-483-21
RESULT 123
US-10-693-536-11
; Sequence 11, Application US/10693536
; Publication No. US20040067556A1
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-463-973-39
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FURTHER REPERENCE: JHU1120-17

CURRENT PILING DATE: 2003-06-17

PRIOR APPLICATION NUMBER: US/09/872,856

PRIOR APPLICATION NUMBER: US 09/124,180

PRIOR APPLICATION NUMBER: US 09/124,180

PRIOR FILING DATE: 1998-07-28

PRIOR APPLICATION NUMBER: US 09/019,070

PRIOR FILING DATE: 1998-02-05

PRIOR APPLICATION NUMBER: US 08/862,445

PRIOR APPLICATION NUMBER: US 08/862,445
                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.1 SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 39, Ap
Publication No.
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                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/525,596 FILING DATE: 1995-10-25 APPLICATION NUMBER: PCT/US 94/03019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/847,910
FILING DATE: 1997-04-28
APPLICATION NUMBER: US 08/795,071
FILING DATE: 1997-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/862,445 FILING DATE: 1997-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                       Conservative
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Pred. No. 2.9e-05;
                                                                                                                                                                                                       2; Mismatches
                                                                                                                                                                                                                        Score 97; I
Pred. No. 2.
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                                                                                                                            93
                                                                                                                                                                                                                                               DB 15;
                                                                                                                                                                                                                        .9e-05;
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NAME/KEY: Protein
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LOCATION: 1..119
;
SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-10-693-536-11
                                                                                                                                                                                                                                  RESULT 124
US-10-758-210-11
                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                         Sequence 11, Application US/10758210 Publication No. US20040127696A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 17; Conserv
APPLICANT: LEE, Se-Jin
APPLICANT: HUYNH, THAN'N
THE OF INVENTION: ANTIBODIES BINDING TO
FILE REFERENCE: JHU1130-2
CURRENT APPLICATION NUMBER: US/10/758,210
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR FILING DATE: 1999-10-05
                                                                                                                APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin APPLICANT: HUYNH, Thanh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (619) 678-5
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/619,061

FILING DATE: 18-Jul-2000

APPLICATION NUMBER: US/09/097,616

FILING DATE: 15-JUN-1998

APPLICATION NUMBER: US 08/581,529

FILING DATE: 15-APR-1996

ATTORNEY/AGENT INFORMATION:

REGISTRATION NUMBER: 38,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 07265/082001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HUYNI, THANN
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Lee, Se-Jin
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                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
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FILING DATE: 23-Oct-2003
CLASSIFICATION: Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: La Jolla
STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLONE: Vgr-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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85.0%;
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; Pred. No. 2.9e
2; Mismatches
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                                                                                                   GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                                                                                                           DB 15; Length 119;
2.9e-05;
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RESULT 125
US-10-366-345-62
; Sequence 62, Application US/10366345
; Publication No. US20030224501A1
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; NAME/KEY: DOMAIN
; LOCATION: (1)..(143)
; OTHER INFORMATION:
US-10-002-278-5
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 126
US-10-002-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens US-10-366-345-62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 1.

NUMBER OF SEQ ID NOS: 0.0

SEQ ID NO 11

LENGTH: 119
                                                                                                                                                              FILE REFERENCE: 0575/40314 A
CURRENT APPLICATION NUMBER: US/10/002,278
CURRENT FILING DATE: 2001-11-02
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 17; Conserv
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APPLICANT: Young, et al.
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polymucleotides, Polypeptides and
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
SOFTWARE: Patentin version 3.2
SEQ ID NO 62
LENGTH: 139
TYPE: DET
                                                                                                                                                                                                                                                                                                                                                  Sequence 5, Application US/10002278 Publication No. US20020132334A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                         APPLICANT: Jessell, Thomas M.
APPLICANT: Basler, Konard
APPLICANT: Yamada, Toshiya
TITLE OF INVENTION: CLONING, EXPRESSION AND USES OF DORSALIN-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 08/581,528
PRIOR FILING DATE: 1996-01-09
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR FILING DATE: 1994-07-08
NUMBER OF SEQ ID NOS: 21
                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                            LENGTH: 143
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                       OTHER INFORMATION: COOH-terminus of BMP-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 MNPEYVPKPCCAPTKLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74 MNPEYVPKPCCAPTKLNAIS 93
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nilarity 85.0%;
Conservative
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85.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Mismatches
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Pred. No. 3.
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Pred. No. 2.
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2.9e-05;
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Sequence 4, Application US/09784911

Patent No. US20020072115A1

GENERAL INFORMATION:
APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION UNMBER: US/09/784,911

CURRENT FILING DATE: 2001-09-17

NUMBER OF SEC ID NOS: 30
                                                                                                   ; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (186)
; OTHER INFORMATION: X
US-09-784-911-4
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US-09-784-911-4
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US-09-784-911-8
; Sequence 8, Application US/09784911
; Patent No. US20020072115A1
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Best Local S
Matches 17
                                                                                                                                                                                   SOFTWARE: PatentIn version 2.1
SEQ ID NO 4
LENGTH: 437
TYPE: PRT
ORGANISM: mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonal Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT FILING DATE: 2001-09-17
RUMBER OF SEQ ID NOS: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version 2.1 SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                  Query Match
Best Local :
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TYPE: PRT
                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388 MNPEYVPKPCCAPTKLNAIS 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98 MNPEYVPKPCCAPTKLNAIS 117
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17; Conserv
1 INPETVPKPCCAPTQLNAIS 20
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                                      Conservative
                                                                                                                       Xaa at position 186 is Tyr or His
                                                87.4%;
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85.0%;
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Pred. No. 0.0001;
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Pred. No. 3.5e-05;
                                                  Score 97; DB 9; Length 437; Pred. No. 0.0001;
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                                      Mismatches
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                                      Indels
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                                      Gaps
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392 MNPEYVPKPCCAPTKINAIS 411

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RESULT 130
US-10-122-026-19
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APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION NUMBER: US/09/784,911
CURRENT FILING DATE: 2001-09-17
NUMBER OF SEO ID NOS: 30
SOFTWARE: Patentin version 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 451
TYPE: PRT
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Local Similarity 85.0%;
hes 17; Conservative
                                                                                                                                                                                                                                                                                                           ZIP: 02110

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUBERASAMPATH, THANGAVEL TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: JONES, WILLIAM K
TUCKER, RONALD F
RUEGER, DAVID C
                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 390 MNPEYVPKPCCAPTKLNAIS 409
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APPLICATION NUMBER: US 08/402,542
FILING DATE: 13. MAR-1995
APPLICATION UNMBER: US 08/840,510
FILING DATE: 31-MAR-1993
APPLICATION NUMBER: US 08/029,335
FILING DATE: 04-MAR-1993
APPLICATION NUMBER: US 07/971,091
FILING DATE: 03-NOV-1992
APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
                                                                                                                                                                                                         APPLICATION NUMBER: US/10/122,026
ETILING DATE: 29-Aug-2002
CLASSIFICATION: cUnknown>
R APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Patent Administrator, Testa, Hurwitz & Thibeault, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10122026
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
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Pred. No. 0
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Best Local S
Matches 17
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Publication No. US20030185792A1
GENERAL INFORMATION:
                                                                                                                                                                                                               SEQ ID NO 33
                                                                   Matches
                                                                                                     Query Match
                                                                                                                                                                                                                                              APPLICANT: Keck, P.
TITLE OF INVENTION: MORPHOGEN ANALOGS OF BOND MORPHOGENIC PROTEINS
FILE REPERROE: CIBT-P04-566
CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT FILING DATE: 2002-06-06
PRIOR APPLICATION NUMBER: 09/791946
PRIOR APPLICATION NUMBER: 09/791946
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 64
                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                       LENGTH: 513
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: STK-060CN INFORMATION FOR SEQ ID NO: 19: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                y Match 87.4%;
Local Similarity 85.0%;
nes 17; Conservative ;
                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Protein LOCATION: 1.513 OTHER INFORMATION: PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              468 MNPEYVPKPCCAPTKLNAIS 487
468 MNPEYVPKPCCAPTKLNAIS 487
                        1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
                                                                   l Similarity
17; Conserv
                                                                                                                                                                                                                                  PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS:
JOURNAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/923,780
FILING DATE: 31-JUL-1992
APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 513 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAGES: 984
DATE: 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/667,274 FILING DATE: 11-MAR-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/938,336 FILING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VOLUME:
                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9843-9847
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                                                                                  87.4%;
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Pred. No. 0.00012;
2; Mismatches 1
                                                                                      Score 97; DB 14;
Pred. No. 0.00012;
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                                  20
                                                                       Mismatches
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                                                                                                     Length 513;
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RESULT 132

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RESULT 133
US-10-291-265-816
; Sequence 816, Ap
; Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-366-345-38; Sequence 38, Application US/10366345; Publication No. US20030224501A1
                                                                                                                                                              RESULT 134
US-10-375-150-8
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                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-10-291-265-816
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TITLE OF INVENTION: NO. US20030232054Alel Nu
TITLE OF INVENTION: NO. US20030232054Alel Nu
FILE REFERENCE: 21272-017 (785)
CURRENT APPLICATION NUMBER: US/10/291,265
CURRENT FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
PRIOR FILING DATE: 2000-09-15
                                                                                               Sequence 8, Application US/10375150 Publication No. US20030235888A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn version 3.2
SEQ ID NO 38
LENGTH: 513
TYPE: PRT
ORGANISM: Homo sapiens
3-10-366-345-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Young, e
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                     Query Match
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CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides and
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Fa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Hyseq, APPLICANT: Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                 APPLICANT: Israel, D:
APPLICANT: Wolfman, I
TITLE OF INVENTION: I
TITLE OF INVENTION: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MATCH 87.4%;
Local Similarity 85.0%;
es 17; Conservative
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                                                                                                                                                                                                                                              468 MNPEYVPKPCCAPTKLNAIS 487
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17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10291265
                                                      Israel, David
Wolfman, Neil M.
                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                         87.4%;
85.0%;
                 Recombinant Bone Morphogenetic Protein Heterodimers, Compositions and Methods of Use
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2;
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Pred. No. 0.00012;
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                                                                                                                                                                                                                                                                                                                            Mismatches
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RESULT 135
US-08-260-675-13
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Best Local Similarity
Thehes 17; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13, Application US/08260675
Publication No. US20030104993A1
GENERAL INFORMATION:
APPLICANT: RUBGER, DAVID C
APPLICANT: KUBERASAMPATH, THANGAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO:
                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PALENTIN Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
                                                                                                             ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/375,150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
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STREET: o,
STREET: o,
                                                                                                                                                                                                 STREET: 55 ST
CITY: BOSTON
                                                                                                                                                  COUNTRY: U
ZIP: 02140
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
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55 STATE STREET
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                     CHARLES M
: MORPHOGEN-INDUCED NERVE REGENERATION AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87.4%;
                                                                                                                                                                                                                                                                     REPAIR
: 33
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Pred. No. 0.
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0.00012;
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US-10-050-050-13
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; OTHER INFORMATION:
US-08-260-675-13
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REFERENCE/DOCKET NUMBER: CRP-070
RELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13, Application US/10050050 Publication No. US20030125230A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 07/752,764
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein 
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 102 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH:
         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
CITY: HOPKINTON
STATE: MA
                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                     TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57 MNPEYVPKPCCAPTKVNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                ZIP: 01748
APPLICATION NUMBER: US/10/050,050
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CATION DATA:
US 07/667,274
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PANG, ROY H.L.
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                         CHARETTE, MARC F. KUBERASAMPATH, THE RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                            COHEN, CHARLES M.
                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84.7%;
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Pred. No. 6.3e-05;
3; Mismatches 1
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US-10-385-064-13
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                                                                                                                                                                       OTHER INFORMATION: VGR-1-FX US-10-385-064-13
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Matches
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                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 13
                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cohen, Charles M. APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (508) 435-6
TELEFAX: (508) 435-6
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Murinae gen. sp
                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                             LENGTH: 102
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nes 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             57 MNPEYVPKPCCAPTKVNAIS 76
                                    57 MNPEYVPKPCCAPTKVNAIS 76
                                                                                                         16; Conservative
                                                                     1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 102 amino acids TYPE: amino acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oppermann, Hermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kuberasampath,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10385064
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US20040102373A1
                                                                                                                        84.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein
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APPLICANT: REGER, DAVID CO.

TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CBM-2 DIV (00560-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR PRICINGULATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER: 08/396,684
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
APPLICATION NUMBER: US/08/445,882
APPLICATION NUMBER: US/08/445,882
APPLICATION NUMBER: US/08/445,882
APPLICATION NUMBER: US/08/445,882
APPLICATION DATE: 2-MRY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: GRP-074DV
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
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OTHER INFORMATION: /note= "VGR-1(FX)"
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
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Pred. No. 6.3e-05;
3; Mismatches 1
                    Score 94; I
Pred. No. 6.
Mismatches
                            .3e-05;
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US-08-260-675-27
Sequence 27, Application US/08260675
Publication No. US20030104993A1
GENERAL INFORMATION:
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US-10-187-394-30
                                                                                                                                                                                                                                                                 Matches
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Best Local Similarity
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Publication No. US20030176667A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATI
APPLICANT: KEC
APPLICANT: SMA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-248-7000
                                                  APPLICANT:
                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIOM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US/09/496,398
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: PITCHER ESQ, EDMUND R REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/10 FILING DATE: 28-JUNE-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 07-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/0 FILING DATE: 02-FEB-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
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RUEGER, DAVID C
KUBERASAMPATH, THAN
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               115 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125 HIGH STREET
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                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
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07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                                                                                                                                               81.5%;
82.6%;
                                                                                                                                                                                                                                                                                                                                                /note= "OP-1 MORPHON PROTEIN"
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                                                    THANGAVEL
                                                                                                                                                                                                                                                                0;
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Pred. No. 0.0002;
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                                                                                                                                                                                                                                                                                               DB 14;
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US-09-952-318A-27
Sequence 27, Application US/09952318A
Publication No. US20030224979A1
GENERAL INFORMATION:
APPLICANT: Kubersampath et al
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
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                                                                                                                                                       RESULT 140
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Best Local :
                                                                                                                                                                                                                                                                                                                                                      PEATURE:
NAME/KEY: Protein
LOCATION: 1.102
OTHER INFORMATION:
CURRENT APPLICATION NUMBER: US/09/952,318A
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: lin
MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
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PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: COHEN, C
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RELECOMMUNICATION INFORMATION:
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STREET:
STREET:
BOSTON
MA
                                                                                                                                                                                                                                                                          Local Similarity
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REFERENCE/DOCKET NUMBER: CR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
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                                                                                                                                                                                                        59 PDHVPKPCCAPTKLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
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55 STATE STREET
                                                                                                                                                                                                                                                                           Conservative
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: MORPHOGEN-INDUCED NERVE REGENERATION AND
: REPAIR
                                                                                                                                                                                                                                                                                          78.4%;
83.3%;
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                                                   AND/OR INCREASE BONE MASS IN
                                                                                                                                                                                                                                                                                                         Length 102;
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RESULT 141
US-10-050-050-27
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PRIOR FILLING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILLING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILLING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923,780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 33
SOFTWARE: PatentIn version 3.1
SEQ ID NO 27
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PRIOR APPLICATION NUMBER: 07/752,847
PRIOR FILING DATE: 1991-08-30
PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 102
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                           ZIP: 01748

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS.
                                                                           APPLICATION NUMBER: US/08/461,113
FILING DATE: «Unknown»
APPLICATION UNMBER: US 08/445,882
FILING DATE: 22-WAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 33
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: HOPKINTON
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vo. US20030125230A1
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PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E
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CHARETTE, MARC F.
KUBERASAMPATH, THA
RUEGER, DAVID C.
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Pred. No. 0
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0.00052;
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Matches
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                                                                                   APPLICATION NUMBER: US 08/478
FILING DATE: 07-UN-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDWUND R
NAME: PITCHER ESQ, EDWUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                       TELEFAX: 617-248-7100 INFORMATION FOR SEQ ID NO:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPUTER:
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: SINGLE CHAIL TITLE OF INVENTION: SUPERFAMILY NUMBER OF SEQUENCES: 45
SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acid
                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/496,398
FILING DATE: 02-FEB-2000
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ ADDRESSEE: THIBEAULT, LLP
                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: BOSTON
                                                                        ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 1..102
OTHER INFORMATION: /label= EMP5
SEQUENCE DESCRIPTION: SEQ ID NO: 27:
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15; Conserv
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TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KECK, PETER
SMART, JOHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHARACTERISTICS:
                                                                          617-248-7000
                                                                                                                                                                                            UMBER: US 08/478,097
07-JUN-1995
                                                                                                                                                                                                                                                                                                                        28-JUNE-2002
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83.3%;
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                                                                                                                                                                                                                                                                                                                                                                           Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                         US/10/187,394
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Pred. No. 0.00052;
2; Mismatches 1
                                                                                                               STK-059CN
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MOLECULE TYPE:

protein

STRANDEDNESS: TOPOLOGY:

S: single linear

g: 102 amino acids amino acid

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RESULT 144
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; LOCATION: 1..102
; OTHER INFORMATION:
US-10-187-394-13
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US-09-389-705-13
                                                                                                                Matches
                                                                                                                                                 Query Match
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Publication No. US20010018509A1
GENERAL INFORMATION:
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                Local Similarity
                                                                                                                                                                                               NAME/KEY: Protein
LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 09/153,733
FILING DATE: <UNKNOWN>
ATTORNEY_DAENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R. REGISTRATION NUMBER: 31,678
REFERENCE_DOCKET NUMBER: FD2279 PCT
TELECCMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: LBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/389,705

FILING DATE: 03-Sep-1999

CLASSIFICATION: CUNKNOWN>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                75
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                                                                             3 PETVPKPCCAPTQLNAIS 20
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STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                 CLONE: BMP-5
                                                                                                                                                                                                                                                                                                                                                  LENGTH: 118 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (619) 455-510
                                                                                                                  Conservative
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                                                                                                                                78.4%;
83.3%;
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83.3%;
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                                                                                                               2; Mismatches
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Pred. No. 0.00052;
2; Mismatches 1
                                                                                                                                Score 87;
Pred. No.
                                                                                                                                0.0006;
                                                                                                                                                 DB 9;
                                                                                                                                                 Length 118;
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RESULT 145
US-10-154-333-13
; Sequence 13, Application US/10154333
; Publication US20030109684A1
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Best Local Similarity
Watches 15; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/115,406
CURRENT FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR FILING DATE: 1999-04-28
PRIOR PILING DATE: 1998-10-13
PRIOR PILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: 05/US94/00685
PRIOR FILING DATE: 1995-10-23
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
PRIOR FILING DATE: 1993-01-12
PRIOR PILING DATE: 1993-01-12
PRIOR FILING DATE: 1993-01-12
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APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/10115406 Publication No. US20020127612A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL
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             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DCS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/154,333
FILING DATE: 21-May-2002
CLASSIFICATION - CURKNOWN>
PRIOR APPLICATION NUMBER: US/09/389,705
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: CURKNOWN>
ATTORNEY/AGENT INFORMATION:
NAWE: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 11,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AL INFORMATION:
APPLICANT: JOHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75
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STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PDHVPKPCCAPTKLNAIS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PETYPKPCCAPTQLNAIS 20
TELEFAX: (619) 455-5110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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83.3%;
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Pred. No. 0
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0.0006;
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FILE REFERENCE: JHU1190-7:
CURRENT APPLICATION NUMBER: US/10/704,223
CURRENT FILLING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 10/115,406
PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1999-04-28
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR FILING DATE: 1993-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
                                                                                                                                                                     RESULT 147
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                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-704-223-11
                                                                                                                                                 US-09-813-459-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn version 3.1
SEQ ID NO 11
LENGTH: 118
                                                                               Sequence 14, Application US/09813459
Patent No. US20020107369A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: THE JOHNS HOPKINS UNIVERSITY APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
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Cunningham, No. US20020107369A1een
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
NUMBER OF SEQUENCES: 26
                                                                  APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15;
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LOCATION:
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                                                                                                                                                                                                                                   PDHVPKPCCAPTKLNAIS
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No. US20040152143A1
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1..118
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83.3%;
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Pred. No.
                                                                                                                                                                                                                                   92
                                                                                                                                                                                                                                                                                                                  Score 87; DB 16;
Pred. No. 0.0006;
2; Mismatches
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                            PRIOR APPLICATION NUMBER: 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: 08/62,445
PRIOR ELING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/947,910
PRIOR APPLICATION NUMBER: 08/947,910
PRIOR PILING DATE: 1997-04-28
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: 08/525,596
PRIOR APPLICATION NUMBER: 08/70594/03019
                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-859-211-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 148
                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 41, Application US/09859211
Patent No. US20020157125A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                               FILE REFERENCE: 07265/144001
CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
                                                                                                                                                                                                                                                                                                                           APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        76
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0;

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NAME/KEY: Protein
LOCATION: 1.119
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-813-459-14
                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (619) 455-5:
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDILM TYPE: Floppy disk

COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION NUMBER: US/09/813,459

FILING DATE: 20-Mar-2001

CLASSIFICATION: «Unknown»

PRIOR APPLICATION UNMER: 08/624,635

PILING DATE: -Unknown»

APPLICATION UNMER: 08/624,635

PILING DATE: -Unknown»

ATTORNEY/AGENT INFORMATION:

NAME: Wethere11 Jr., Ph.D., John R.,
                                                                                                                                                                                                                                                           TOPOLOGY: linear
MOLECULE TYPE: protein
IMMEDIATE SOURCE:
CLONE: BMP-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Spensle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 455-5100
                                  3 PETYPKPCCAPTQLNAIS
                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
PDHVPKPCCAPTKLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Wetherell, Jr., Ph.D., John REGISTRATION NUMBER: 31,678 REFERENCE/DOCKET NUMBER: PD-3054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                        ENGTH: 119 amino acids
                                                                               Conservative
                                                                                                                                                                                                                                                                                                        protein
                                                                                                78.4%;
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    93
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                                                                             Score 87; DB 9;
Pred. No. 0.0006;
2; Mismatches
                                                                                                                        Length 119;
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                                                                                      Gaps
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US-09-880-708-19
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                                                                       Query Match
Best Local S
Matches 15
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SOFTWARE: Fasts
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Best Local (
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                                                                                                                                                                                                                                                                                       TELEFAX: 619/677-1465
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FRACESCY for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/880,708
FILING DATE: 12-7un-2001
PRIOR APPLICATION NUMBER: 09/145,060
FILING DATE: CURROWN
APPLICATION NUMBER: 09/145,060
FILING DATE: CURROWN
APPLICATION NUMBER: 09/145,060
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                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY_AGENT INFOEMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REGISTRATION NUMBER: 07265/057002
TELECOMMUNICATION INFORMATION:
TELEPHONE: 858/677-1456
                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                           SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HUYDH, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
NUMBER OF SEQUENCES: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lee, Se-Jin
 76
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                                  3 PETVPKPCCAPTQLNAIS 20
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                                                                                        Similarity
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15; Conserv
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FastSEQ for Windows Version 4.0
PDHVPKPCCAPTKLNAIS 93
                                                                                                                                                                                                                                                    TYPE: amino acid
                                                                                                                                                                                   CLONE:
                                                                                                                                                                                                                                                                     LENGTH: 119 amino acids
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                                                                       Conservative
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                                                                                      78.4%;
83.3%;
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                                                                                      Score 87; DB 9;
Pred. No. 0.0006;
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Pred. No. 0.0006;
                                                                       Mismatches
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                                                                                                      DB 9; Length 119;
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                                                                     Indels
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Johns Hopkins University School of Medicine
APPLICANT: Jee, Se-Jin
APPLICANT: Mebherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
FILE REFERENCE: JHU1120-17
CURRENT APPLICATION NUMBER: US/09/872,856
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 09/124,180
PRIOR FILING DATE: 1998-07-28
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: US 08/862,445
PRIOR APPLICATION NUMBER: US 08/867,910
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: US 08/95,071
PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/95,071
PRIOR APPLICATION NUMBER: US 08/95,071
PRIOR APPLICATION NUMBER: US 08/95,596
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR APPLICATION NUMBER: US 08/93,393
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US-10-335-483-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens US-09-872-856-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 150
US-09-872-856-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 23, Application US/10335483 Publication No. US20030120058A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.1 SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 08/033,923 PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 119
         ZIP: 92037

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Versic
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/335,483
FILING DATE: 31-Dec-2002
CLASSIFICATION: cUnknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                      Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Huynh, Thanh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PDHVPKPCCAPTKLNAIS 93
                                                                                                                                                                                                                                                                        CITY: La Jolla
STATE: CA
                                                                                                                                                                                                                             COUNTRY: US
ZIP: 92037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78.4%;
83.3%;
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Best Query Match

Local

Similarity

78.4%; 83.3%;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 83...
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 41, Application US/10463973 Publication No. US20040055027A1
                                                                 SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation
FILE REFERENCE: JHU1120-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/463,973
CURRENT FILING DATE: 2003-06-17
PRIOR APPLICATION NUMBER: US/09/872,856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-678-5070
TELEPAX: 619-678-5099
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Johns Hopkins University School of Medicine APPLICANT: Lee, Se-Jin APPLICANT: McPherron, Alexandra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENERAL INFORMATION:
                                                                                     SOFTWARE: PatentIn version 3.1
ORGANISM: Homo sapiens
                                        ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/177,860
FILING DATE: <UNKNOWN:
APPLICATION NUMBER: 08/525,596
FILING DATE: 19-SEP-1995
APPLICATION NUMBER: PCT/US94/07762
APPLICATION NUMBER: PCT/US94/07762
FILING DATE: 08-UUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 09/019,070 FILING DATE: 1998-02-05 APPLICATION NUMBER: US 08/862,445 FILING DATE: 1997-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2001-06-01
APPLICATION NUMBER: US 09/124,180
FILING DATE: 1998-07-28
                                                                                                                                                                    APPLICATION NUMBER: US 08/795,071
FILING DATE: 1997-02-05
APPLICATION NUMBER: US 08/525,596
FILING DATE: 1995-10-25
APPLICATION NUMBER: PCT/US 94/03019
FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/847,910 FILING DATE: 1997-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                              APPLICATION NUMBER: US 08/033,923 FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Wetherell, Jr., Ph.D, John R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 119 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLONE: BMP-5
                                                                                                            ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein
1..119
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83.3%;
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Pred. No. 0.00
2; Mismatches
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US-10-693-536-13
                                                                                                                       ; LOCATION: 1.119
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-10-693-536-13
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                                                                Matches
                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/619,061
FILING DATE: 18-U1-2000
APPLICATION NUMBER: US/09/097,616
FILING DATE: 15-JUN-1998
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6 NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/082001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lee,
                                                                                                                                                                                                  FEATURE
                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 PETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
76
                              3 PETYPKPCCAPTQLNAIS 20
                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PDHVPKPCCAPTKLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/10/693,536 FILING DATE: 23-Oct-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: <Unknown>
PDHVPKPCCAPTKLNAIS 93
                                                                                                                                                                  NAME/KEY: Protein LOCATION: 1..119
                                                                                                                                                                                                                CLONE: BMP-5
                                                                                                                                                                                                                                                                                                                  LENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (619)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10693536
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                                                                Conservative
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                                                                                78.4%;
83.3%;
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                                                                2:
                                                                                Score 87; I
                                                                Mismatches
                                                                                  DB 15; Length 119;
0.0006;
                                                                   Indels
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RESULT 156
US-10-122-026-18
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-366-345-61
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US-10-366-345-61
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-758-210-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: JHU1130-2
CURRENT APPLICATION NUMBER: US/10/758,210
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR PILING DATE: 1999-10-05
PRIOR PILING DATE: 1996-01-09
PRIOR APPLICATION NUMBER: US/08/581,528
PRIOR FILING DATE: 1996-01-09
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR FILING DATE: 1994-07-08
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 154
US-10-758-210-13
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Best Local S
Matches 15
                                                                                                           Sequence 18, Application US/10122026 Publication No. US20030105004A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: PT189
CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
SOFTWARE: Patentin version 3.2
SEQ ID NO 61
                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides
TITLE OF INVENTION: Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: P
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APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin
APPLICANT: HUYNH, Thanh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 61, Application US/10366345
Publication No. US20030224501A1
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                                                                                       GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: HUYNH, Thanh
TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                       APPLICANT:
                                                                                                                                                                                                                           95
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                                                                                                                                                                                                                                                                                                   Conservative
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                               JONES, WILLIAM K
TUCKER, RONALD F
RUEGER, DAVID C
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                   78.4%;
83.3%;
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83.3%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                 0.00069;
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; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-122-026-18
                                                                  Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: CAMACHO, JENNIFER A.
REGISTRATION NUMBER: 43,526
REFERENCE/DOCKET NUMBER: STX-060CN
INFORMATION FOR SEQ ID NO: 18;
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
ATTORNBY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                          LOCATION: 1..453
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/122,026
                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Patent Administrator,
Thibeault, LLP
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KUBERASAMPATH, THANGAVEL TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
  410 PDHVPKPCCAPTKLNAIS
                                     PETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/402,542 FILING DATE: 13-MAR-1995 APPLICATION NUMBER: US 08/840,510 FILING DATE: 31-MAR-1993 APPLICATION NUMBER: US 08/029,335 FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                         AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
                                                                                                                                                                                                                                                        JOURNAL:
                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/971,091 FILING DATE: 03-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 29-Aug-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 453 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/923,780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/946,235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'ILING DATE: 16-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [LING DATE: 28-AUG-1992
                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATION NUMBER: US 07/938,336
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                                                                                           78.4%;
                                                                                                                                                                                                                                                                                                                                                        Protein
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427
                                                                           2; Mismatches
                                                                                              Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                 /note= "PRE-PRO-BMP5 (HUMAN)"
                                                                                                                  DB 14;
                                                                                                .0022;
                                                                                                                Length 453;
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US-10-164-279-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 157
US-10-286-152A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-10-164-279-29
                                                                                                                                                                                                                                         RESULT 159
                  GENERAL INFORMATION:
APPLICANT: Young, et al.
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides,
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PIL89
CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT FILING DATE: 2002-06-06
PRIOR APPLICATION NUMBER: 09/791946
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 64
SOFTWARE: Patentin version 3.1
SEQ ID NO 29
TENERGY APPLICATION OF SEQ ID NO 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 29, Application US/10164279 Publication No. US20030185792A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/10286152A Publication No. US20030134308A1 GENERAL INFORMATION:
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Best Local :
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LENGTH: 454
                                                                                                                                                                             Sequence 37, Application US/10366345
Publication No. US20030224501A1
                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local (
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TITLE OF INVENTION: Bone Morphogenic Proteins (BMP), BMP Receptors and EMP Binding Pr
TITLE OF INVENTION: and Their Use in the Diagnosis and Treatment of Glaucoma
FILE REFERENCE: 2312 US
CURRENT FAPPLICATION NUMBER: US/10/286,152A
CURRENT FILING DATE: 2002-02-28
NUMBER OF SEQ ID NOS: 54
                                                                                                                                                                                                                    -10-366-345-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Alcon Research, Ltd. APPLICANT: Clark, Abbot F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Keck, P.
TITLE OF INVENTION: MORPHOGEN ANALOGS OF BOND MORPHOGENIC PROTEINS
FILE REFERENCE: CIBT-P04-566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 454
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              411
                                                                                                                                                                                                                                                                                                   411 PDHVPKPCCAPTKLNAIS 428
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                                                                                                                                                                                                                                                                                                                                     3 PETVPKPCCAPTQLNAIS 20
      PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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83.3%;
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83.3%;
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Pred. No.
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Pred. No. 0.0022;
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; Sequence 28, Application US/09813398 ; Patent No. US20020169292A1 ; GENERAL INFORMATION:
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US-09-813-398-28
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                                                                                                                  ; MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 160
                                                       Query Match
Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10, Ar
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                       TELEPAX: 617-876-5851
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 02140-2387
COMPUTER READABLE FORM:
MEDIUM TYPB: Tage
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC-DOS/MS-D
COPERATING SYSTEM: PC-DOS/MS-D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH:
                                                                                                                                                                                                                                                  NAME: Kapinos Ellen J. REGISTATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
TITLE OF INVENTION: Recombin
                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
PRIOR APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 6, _
CTTY: Cambridge
                                                                                                                                              TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                       ELEPHONE:
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411 PDHVPKPCCAPTKLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78.4%;
1 Similarity 83.3%;
15; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                454
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                            ω
                                                         l Similarity
15; Conserv
                                                                                                                                                            amino acid
                          PETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10375150
No. US20030235888A1
                                                          Conservative
                                                                                                                                           linear
                                                                                                                                                                                                                                        617-876-1170
                                                                                                                              protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant Bone Morphogenetic Protein Heterodimers, Compositions and Methods of
                                                                     78.4%;
83.3%;
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                                                                                                                                                                                                                                                                                                                                              US/07/989,847
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Pred. No. 0.0022;
2; Mismatches
                                                                                                                                                                                                                                                                       GI-5192B
 428
                            20
                                                          2; Mismatches
                                                                       Score 87; DB 14;
Pred. No. 0.0022;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Version #1.25
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                                                                                       DB 14;
                                                                                       Length 454;
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PPLICANT: Bruce D. Weintraub PPLICANT: Mariusz W. Szkudl

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RESULT 162
US-09-754-831A-15
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Best Local Similarity
Matches 15; Conserve
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SEQ ID NO 28
LENGTH: 455
TYPE: PRT
ORGANISM: HOMO SAPIEN
US-09-813-398-28
                                                                                                                                                 ; OTHER INFORMATION: Biosynthetic COP4 protein with osteogenic activity US-09-754-831A-15
                                                                           Matches
                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version 3.0
SEQ ID NO 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15, Application US/09754831A Publication No. US20030228345A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/813,398 CURRENT FILING DATE: 2001-03-20 PRIOR APPLICATION NUMBER: PCT/US99/05908 PRIOR FILING DATE: 1999-03-19 PRIOR APPLICATION NUMBER: PCT/US98/19772 PRIOR FILING DATE: 1998-09-22
                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
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CURRENT APPLICATION NUMBER: US/09/754,831A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Oppermann, Herman APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR FILING DATE: 1989-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1992-12-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 08/145,812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 07/232,630
                                                                                                                                                                                    TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      [TLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                            ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CANT: University of Maryland OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
                                                                                                                                                                                                                                                                                                                                        FILING DATE: 1988-08-15
APPLICATION NUMBER: US 07/179,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 412 PDHVPKPCCAPTKLNAIS 429
                                                                         14;
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                                   1 INPETVPKPCCAPTQLNAIS 20
 MNPGKVPKPCCVPTELSAIS 71
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                                                                           Conservative
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83.3%;
                                                                                         74.8%;
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                                                                         Mismatches
                                                                                           Score 83; I
Pred. No. 0
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Pred. No. 0.
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0.0017;
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                                                                                                           Length 97
                                                                           Indels
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RESULT 163

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FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
PRIOR FILING DATE: 1989-02-23
PRIOR FILING DATE: 1989-02-23
PRIOR FILING DATE: 1989-02-23
PRIOR FILING DATE: 1989-02-23
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US-09-754-831A-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-754-831A-16
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PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR FILING DATE: 1993-11-01
PRIOR FILING DATE: 1992-12-22
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR APPLICATION NUMBER: US 07/315,342
SOFTWARE: Pa
SEQ ID NO 13
LENGTH: 98
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SEQ ID NO 16
LENGTH: 97
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Best Local Similarity
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                                                                                         PRIOR APPLICATION NUMBER: US 07/232,630 PRIOR FILING DATE: 1988-08-15 PRIOR APPLICATION NUMBER: US 07/179,406 PRIOR FILING DATE: 1988-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR FILING DATE: 1988-08-15
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR FILING DATE: 1988-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Oppermann, Herman APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kuberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        52 MNPGKVPKPCCVPTELSAIS 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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Pred. No. 0.0017;
3; Mismatches 3
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Gaps

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GENERAL INFORMATION:
APPLICANT: Oppermann, Herman
APPLICANT: Ruberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
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US-09-754-831A-14
                                                                                                                                                                                                                                                                                                                   RESULT 166
US-09-754-831A-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Biosynthetic COP3 protein with osteogenic activity
US-09-754-831A-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR PILING DATE: 1992-12-22
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR APPLICATION NUMBER: US 07/322,630
PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR FILING DATE: 1988-08-15
PRIOR FILING DATE: 1988-08-15
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 14
LENGTH: 98
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Best Local Similarity 70.0%;
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                                                                                                                                                                                                                                                                      Sequence 44, Application US/09754831A Publication No. US20030228345A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Oppermann, Herman
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: STK-008CN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT ORGANISM: Artificial Sequence
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vo. US20030228345A1
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rath, Thangavel
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70.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 83; DB 10;
Pred. No. 0.0017;
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PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR FILING DATE: 1989-02-23
PRIOR PRIOR PRICATION NUMBER: US 07/232,630
PRIOR REILING DATE: 1988-08-15
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR PILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin version 3.0
SEQ ID NO 44
LENGTH: 102
; OTHER INFORMATION: Xaa=Ser or Asn US-10-619-910-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-754-831A-44
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8, Application US/10619910 Publication No. US20040053844A1
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Tanihara, Masso
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILING DATE: 2003-07-15
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Kyocera Corporation APPLICANT: Nishimura, Yoshihiko APPLICANT: Suzuki, Yoshihisa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 20
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                             PEATURE:
NAME/KEY: MISC_FEATURE
(12)
                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: MISC_FEATURE
LOCATION: (6)..(6)
OTHER INFORMATION: Xaa=Ile or Val
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                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Xaa=Lys,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
OTHER INFORMATION: Synthesized peptide
                                                              FEATURE:
NAME/KEY: MISC_FEATURE
                                                                                                              LOCATION: (12)..(12)
OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                                                   LOCATION: (9)..(9)
OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                                                                                         NAME/KEY: MISC FEATURE
                                                                                                                                                                                                                                                                  FEATURE
                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: MISC_FEATURE LOCATION: (5)..(5)
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14; Conserv
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US-10-187-394-9
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US-10-619-910-4
                                                           Sequence 9, Application US/10187394
Publication No. US20030176667A1
GENERAL INFORMATION:
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 4
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Kyocera Corporation APPLICANT: Nishimura, Yoshihi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE: 2003-07-15
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/619,910
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APPLICANT: Suzuki, Yoshihisa
APPLICANT: Tanihara , Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 22
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                      NAME/KEY: MISC_FEATURE
LOCATION: (19)..(19)
OTHER INFORMATION: Xaa= Ser or Asn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: MISC_FEATURE LOCATION: (8)..(8) OTHER INFORMATION: Xaa=Ile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: MISC_FEATURE
LOCATION: (7)...(7)
OTHER INFORMATION: Xaa=Lys,
                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Synthesized peptide
                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: MISC_FEATURE
APPLICANT: KECK, PETER APPLICANT: SMART, JOHN TITLE OF INVENTION: SIN TITLE OF INVENTION: SUF
                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Xaa=Ala
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                                                                                                                                                                                                                                         l Similarity 65.
13; Conservative
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                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                            VNPEXXPKXCCXPTZLXAIS 22
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 SINGLE CHAIN ANALOGS OF TGF-B SUPERFAMILY (MORPHONS)
                                                                                                                                                                                                                                                       70.3%;
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70.0%;
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1; Mismatche
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Pred. No. 0.0018;
2; Mismatches
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0.0012;
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RESULT 170
US-09-389-705-14
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LOCATION: 1..102
OTHER INFORMATION:
US-10-187-394-9
                                                                                                                                                                                                                                                                                          Sequence 14, Application US/09389705
Publication No. US20010018509A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 12; Conserv
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FILING DATE: 07-JUN-1995
CLASSIFTCATION:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-059CN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 28-JUNE-2
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION UNMER: US
FILING DATE: 02-PEB-20
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 617-248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acid
                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TAM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/187,394
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ
ADDRESSEE: THIBEAULT, LLP
STREET: 125 HIGH STREET
CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: 617-248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 102 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U
ZIP: 02110
COUNTRY: US
ZIF: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS
STREET: 1880 CENTURY PARK EAST,
CITY: LOS ANGELES
STATE: CALIFORNIA
                                                                                                                                                                                                                  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3 NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                         APPLICANT: JOHNS HOPKINS UNIVERSITY
                                                                                                                                                                                                                                                                                                                                                                                                                57 LEPKKVPKPCCAPTRLGAL 75
                                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAI 19
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Pred. No. 0.011;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 102;
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                                                                                       ; TYPE: PRT ; ORGANISM: Drosophila melanogaster US-10-115-406-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-389-705-14
                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/115,406
CURRENT FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: 09/301,520
PRIOR APPLICATION NUMBER: 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR FILING DATE: 1999-04-28
PRIOR PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 09/491,835
PRIOR FILING DATE: 1998-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
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Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                  SOFTWARE: PatentIn version 3.0 SEQ ID NO 12 LENGTH: 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 12, Application US/10115406 Publication No. US20020127612A1
                     Query Match
Best Local Similarity
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SENERAL INFORMATION:

APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHU11190-3
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FILING DATE: <UNKNOWN:
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph. D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: D2279 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
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FILING DATE: 03-Sep-1999
CLASSIFICATION: <Unknown>
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TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein LOCATION: 1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLONE: 60A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single
    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (619) 455-5100
                     69.48;
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; Score 77; DB; Pred. No. 0.01
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Pred. No. 0.012;
                                            DB 13; Length 118;
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  Indels
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       Gaps
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INPETVPKPCCAPTQLNAI 19

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NAME/KEY: Protein
LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-10-154-333-14
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US-10-154-333-14
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                                                                                                                               RESULT 173
US-10-704-223-12
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                                  Sequence 12, Application US/10704223
Publication No. US20040152143A1
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY
APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14, Appropriate Publication No.
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 12; Conserv
APPLICANT: LEE, Se-Jin TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9 FILE REFERENCE: JHU1190-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: «Unknown-
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, UR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/154,333
FILING DATE: 21-May-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                UAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                                                                                               73 LEPKKVPKPCCAPTRLGAL 91
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LEPKKVPKPCCAPTRLGAL
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STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 118 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 90067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLONE: 60A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (619)
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Pred. No. 0.
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; ORGANISM: Drosophila melanogaster US-10-704-223-12
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PRIOR FILING DATE: 2002-04-02
PRIOR PELICATION NUMBER: US 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR PILING DATE: 1995-10-23
PRIOR PILING DATE: 1995-10-23
PRIOR PILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR PILING DATE: 1993-01-12
PRIOR PILING DATE: 1993-01-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 25, Application US/08260675 Publication No. US20030104993A1 GENERAL INFORMATION:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 28
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TYPE: PRT
                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEB: TESTA HURWITZ & THIBEAULT
STREET: 55 STATE STREET
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/667,274
                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                      FILING DATE:
                                                                                                                                                                                                          FILING DATE:
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                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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12; Conserv
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OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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KUBERASAMPATH, THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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63.2%; Pred. No. 0.
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                                                                                                                                                          US/07/922,813
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RESULT 176
US-10-122-026-16
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APPLICANT: Kubersampath et al.
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
                                                                                                                                                                         Matches
                                                                                                                                                                                         Query Match 69.4%;
Best Local Similarity 63.2%;
                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25, Application US/09952318A Publication No. US20030224979A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: JJJ-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR FILING DATE: 1998-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 07/752,847 PRIOR FILING DATE: 1991-08-30 PRIOR APPLICATION NUMBER: 07/667,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR FILING DATE: 1992-07-31
PRIOR FILING DATE: 1992-07-31
                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 33
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 08/432,883
                                                                                                                                                                                                                                                                     LENGTH: 455
TYPE: PRT
ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
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REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH:
                                                                                       410 LEPKKVPKPCCAPTRLGAL 428
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amino acid
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63.2%; Pred. No. 0.
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                                                                                                                                                                                         Score 77; DB 10; Length 455; Pred. No. 0.044;
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0.044;
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Sequence 16, Application US/10122026 Publication No. US20030105004A1 GENERAL INFORMATION:

APPLICANT: JONES, WILLIAM K TUCKER, RONALD F RUEGER, DAVID C

OPPERMANN, HERMANN

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Matches
                                                                              Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSE: Patent Administrator, Testa, Hurwitz &
Thibeault, LLP
                                                                                                                                                                                                                                                                                    LOCATION: 1..455
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/402,542
FILING DATE: 13-WAR-1995
APPLICATION NUMBER: US 08/840,510
FILING DATE: 31-WAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                  SEQUENCE DESCRIPTION: SEQ ID NO: 16:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
1 INPETVPKPCCAPTQLNAI 19 : |: || || || || || || 19
                                                             l Similarity 63.2
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 03-NOV-1992
APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
APPLICATION NUMBER: US 07/938,336
FILING DATE: 28-AUG-1992
APPLICATION NUMBER: US 07/923,780
FILING DATE: 31-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy alsk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/667,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/10/122,026 FILING DATE: 29-Aug-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/029,335 FILING DATE: 04-MAR-1993 APPLICATION NUMBER: US 07/971,091 FILING DATE: 03-NOV-1992 APPLICATION NUMBER: US 07/946,235
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ZIP: 02110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 455 amino acids
TYPE: amino acid
                                                                                                                                                                                                                               VOLUME:
                                                                                                                                                                                                                                                 JOURNAL:
                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
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1991
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Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                   Protein
                                                                              69.4%;
                                                               4.
                                                             Score 77; DB 14; Length 455; Pred. No. 0.044; Mismatches 3; Indels
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US-10-619-910-7

GENERAL INFORMATION:

APPLICANT: Kyocera Corporation

Nishimura, Yoshihiko Suzuki, Yoshihisa Sequence 7, Application US/10619910 Publication No. US20040053844A1

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RESULT 177
US-10-050-050-25
; Sequence 25, App
; Publication No.
                                                                                                                                                 /
// MOLECULE TYPE: protein
// SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-050-050-25
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                                                                       Query Match
Best Local Similarity
Matches 12; Conserv
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                                                                                                                                                                                                                                                                                         INFORMATION
                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/10/050,050
PILING DATE: 15-Jan-2002
CLASSIETCATION: GUNKNOWN>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
PILING DATE: «UNKNOWN>
APPLICATION NUMBER: US 08/445,882
PILING DATE: 22-MAY-1995
AITORNEY/AGENT INFORMATION:
NAME: FENTON Eq., GILLIAN M.
REGISTRATION NUMBER: 36,508
PREPERSON OCCUPET NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
COMPUTER: OF PC-DOS/MS-DOS
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: (508) 435-9001
                                                                                                                                                                                                                                                                     MATION FOR SEQ ID NO: 25: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
410 LEPKKVPKPCCAPTRLGAL 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        410 LEPKKVPKPCCAPTRLGAL 428
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                                  INPETVPKPCCAPTQLNAI 19
                                                                                                                                                                                                                            LENGTH: 455 amino acids
TYPE: amino acid
                                                                                                                                                                                                            TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: MA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                            TELEFAX: (508)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10050050
                                                                         Conservative
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PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COHEN, CHARLES M. CHARETTE, MARC F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KUBERASAMPATH, '
                                                                                           69.4%;
                                                                                                                                                                                                                                                                                                            435-6951
                                                                         4; Mismatches
                                                                                             Score 77; DB 14
Pred. No. 0.044;
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                                                                                                                                                                         25:
                                                                                                                  DB 14;
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                                                                                                                Length 455;
                                                                         Indels
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
                                                                                                                                                                         SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3, Application US/10619910 Publication No. US20040053844A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILING DATE: 2003-07-15
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Kyocera Corporation
APPLICANT: Nishimura, Yoshihiko
APPLICANT: Suzuki, Yoshihisa
                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                       APPLICANT: Tanihara , Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILING DATE: 2003-07-15
NAME/KEY: MISC_FEATURE
LOCATION: (7)...(7)
OTHER INFORMATION: Xaa=Lys, Ser or Thr
                                                              FEATURE:
OTHER INFORMATION: Synthesized peptide
                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: (12)..(12)
OTHER INFORMATION: Xaa=Ala or
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OTHER INFORMATION: Xaa=Lys,
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OTHER INFORMATION: Synthesized peptide
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Pred. No.
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; NAME/KEY: MISC FEATURE
; LOCATION: (19)...(19)
; OTHER INFORMATION: Xaa=Ser or
US-10-619-910-3
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CURRENT APPLICATION NUMBER: US/10/074,978A
CURRENT FILING DATE: 2003-01-07
PRIOR APPLICATION NUMBER: 60/268,221
PRIOR FILING DATE: 2001-02-12
PRIOR APPLICATION NUMBER: 60/335,109
PRIOR FILING DATE: 2001-10-31
PRIOR FILING DATE: 2001-10-31
                                                                                                                                            APPLICANT:
                                                                                             APPLICANT: Smithson, Glennda
TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 21402-269
                                                                                                                                                                            APPLICANT
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NAME/KEY: MISC_FEATURE
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LOCATION: (11)..(11)
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OTHER INFORMATION: Xaa=Ile
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12; Conservative
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Mezes, Peter S
Ellerman, Karen
Heyes, Melvin P
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Edinger, Shlomit
Gunther, Erik
                                                                                                                                                                                                                                       Shimkets, Richard A
Taupier Jr, Raymond J
Moore, No. US20040010119A1lle
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Peyman, John
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Malyankar, Uriel N
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Boldog, Ferenc
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                                                                                                                                                                            Stone, Dave
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Vernet, Corine
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Blalock, Angela
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Fernandes, Elma
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                                                                                                                                                                                                                                                                                       Carol
                                                                                                                                                                                                                                                                                                                                                                                    Vladimir
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                                                                                                                                                                                                                                                                        Richard A
                                                                                                                                                                                                                                                                                                                                                                                                   Uriel M
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Pred. No.
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APPLICANT: Spaderna, Steven K
APPLICANT: Zerhusen, Steven K
ITILE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
ITILE OF INVENTION: Using the Same
FILE REFERENCE: 21402-275
CURRENT APPLICATION NUMBER: US/10/080,334
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR FILING DATE: 2001-09-17
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR APPLICATION NUMBER: 60/31,980
PRIOR APPLICATION NUMBER: 60/31,307
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: 60/330,307
PRIOR FILING DATE: 2001-10-18
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US-10-074-978A-301
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PRIOR FILING DATE: 2001-02-13
PRIOR PEPLICATION NUMBER: 60/276,703
PRIOR APPLICATION NUMBER: 60/276,703
PRIOR APPLICATION NUMBER: 60/330,293
PRIOR TILING DATE: 2001-10-18
PRIOR PEPLICATION NUMBER: 60/322,127
PRIOR PEPLICATION NUMBER: 60/322,127
PRIOR PEPLICATION NUMBER: 60/322,127
PRIOR PEPLICATION NUMBER: 60/320,099
PRIOR PELICATION NUMBER: 60/280,899
PRIOR PELICATION NUMBER: 60/310,797
PRIOR APPLICATION NUMBER: 60/268,646
PRIOR APPLICATION NUMBER: 60/268,646
PRIOR FILING DATE: 2001-02-14
PRIOR FILING DATE: 2001-02-14
PRIOR FILING DATE: 2001-02-14
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LENGTH: 102
TYPE: PRT
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Best Local Similarity
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SOFTWARE: PatentIn Ver. 2.1
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Boldog, Ferenc L
Furtak, Katarzyna
Tchernev, Velizar T
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Baumgartner, Jason C.
Gerlach, Valerie
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Padigaru, Muralidhara
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Vernet, Corine A. 1
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57.9%;
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Pred. No.
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; LENGTH: 105
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-080-334-209
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Publication No.
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Best Local (
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PRIOR FILING DATE: 2001-02-33
NUMBER OF SEQ ID NOS: 388
SOFTWARE: Patentin Ver. 2.1
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PRIOR FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/276,400
PRIOR FILING DATE: 2001-03-16
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APPLICATION NUMBER: 60/291,765
FILING DATE: 2001-05-17
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FILING DATE: 2001-09-10
APPLICATION NUMBER: 60/286,548
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APPLICATION NUMBER: 60/270,220
FILING DATE: 2001-02-21
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APPLICATION NUMBER: 60/281,521
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Spytek, Kimberly
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Grosse, William M.
Alsobrook II, John P
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Patturajan, Meera
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Taupier Jr, Raymond
Gusev, Vladimir Y.
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Miller, Charles E.
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Anderson, David W.
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o. US20040033493A1
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APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
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Pred. No. 0
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0.037;
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NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 832
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APPLICANT: Tchernev, Velizar
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FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                     APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
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APPLICATION NUMBER: 60/266,767
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                                                                        Lepley, Denise M.
Rieger, Daniel K.
Burgess, Catherine E
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Grosse, William M.
Alsobrook II, John P
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Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
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Shimkets, Richard
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Patturajan, Meera
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57.9%;
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Pred. No. 0.
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; OTHER INFORMATION: Description of Artificial Sequence: Transforming ; OTHER INFORMATION: growth factor beta like domain US-10-072-012-834
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US-09-930-512-77
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                                                                 APPLICANT: Peyman, John APPLICANT: Scone, David APPLICANT: MacDougall, Joh TITLE OF INVENTION: No. US: FILE REFERENCE: 21402-091
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APPLICANT: Zerhusen, Bryan D
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CURRENT APPLICATION NUMBER: US/09/930,512
CURRENT FILING DATE: 2001-08-15
PRIOR APPLICATION NUMBER: 60/225,692
PRIOR FILING DATE: 2000-08-16
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PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/267,459
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                  PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/265,412
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105
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No. US20040010118A1
                                                                                                                                                                                                                                                                                                                               Majumder, Kumud
Shimkets, Richard
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Smithson, Glennda
                                                                                                                                                                                                       Gerlach, Valerie L
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                                                                                                                                                                                                                                                                             Edward
                                                                                                                                                                                                                                                                                                                                                                                          Luca
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                                                                                           US20040010118Alel Proteins and Nucleic Acids Encoding Same
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-930-512-77
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Best Local (
APPLICANT: Zerhusen, Bryan D
TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
TITLE OF INVENTION: Using the Same
FILE REFERENCE: 21402-275
CURRENT APPLICATION NUMBER: US/10/080,334
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR FILING DATE: 2001-09-17
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/321,980
PRIOR FILING DATE: 2001-08-13
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APPLICANT:
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APPLICANT:
APPLICANT:
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NUMBER OF SEQ ID NOS: 115
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OR APPLICATION NUMBER: 60/227,085
OR FILING DATE: 2000-08-22
OR APPLICATION NUMBER: 60/227,395
OR FILING DATE: 2000-08-23
OR APPLICATION NUMBER: 60/227,492
OR FILING DATE: 2000-08-24
OR APPLICATION NUMBER: 60/227,600
OR FILING DATE: 2000-08-24
OR APPLICATION NUMBER: 60/227,600
OR FILING DATE: 2000-08-24
OR APPLICATION NUMBER: 60/275,952
OR FILING DATE: 2001-03-14
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FILING DATE: 2000-08-18
APPLICATION NUMBER: 60/226,353
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APPLICATION NUMBER: 60/225,693
FILING DATE: 2000-08-16
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                                                                                                                                                                                                                                                            Liu, Xiaohong
Baumgartner, Jason C.
Gerlach, Valerie
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Vernet, Corine A. N
Malyankar, Uriel M
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Furtak, Katarzyna
Tchernev, Velizar T
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Padigaru, Muralidhara
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Kekuda, Ramesh
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Ferenc L
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55.0%;
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Pred. No. 0.048;
5; Mismatches
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US-10-074-978A-300
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; TYPE: PRT; ORGANISM: Homo sapiens US-10-080-334-210
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Publication No. US20
GENERAL INFORMATION
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Best Local Similarity 55.0
Matches 11; Conservative
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SEQ ID NO 210
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DR FILLING DATE: 2001-04-25
DR APPLICATION NUMBER: 60/291,765
DR FILLING DATE: 2001-05-17
DR APPLICATION NUMBER: 60/270,797
DR APPLICATION NUMBER: 60/270,797
DR FILLING DATE: 2001-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/276,400 FILING DATE: 2001-03-16 APPLICATION NUMBER: 60/270,810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 2001-08-10
APPLICATION NUMBER: 60/270,220
FILING DATE: 2001-02-21
APPLICATION NUMBER: 60/274,295
FILING DATE: 2001-03-08
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FILING DATE: 2001-03-16
APPLICATION NUMBER: 60/311,595
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FILING DATE: 2001-10-18
APPLICATION NUMBER: 60/278,796
FILING DATE: 2001-03-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/318,526 FILING DATE: 2001-09-10
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Herrman, John
Pena, Carol E A
Shimkets, Richard A
Taupier Jr, Raymond J
Moore, No. US20040010119Allle
                                                                                                                                  Rastelli, Luca
Mezes, Peter S
                                                                                                                                                                                                                                                                                                                                                                                                                       Spytek, Kimberly A
Guo, Xiaojia (Sasha)
Fernandes, Elma
                                                                                                  Ellerman, Karen
Heyes, Melvin P
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Malyankar, Uriel M
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Boldog, Ferenc
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Vernet, Corine
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o. US20040010119A1
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55.0%;
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Pred. No. 0
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RESULT 187
US-10-072-012-831
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PRIOR FILING DATE: 2001-10-31
PRIOR PELICATION NUMBER: 60/312,284
PRIOR FILING DATE: 2001-08-14
PRIOR APPLICATION NUMBER: 60/268,496
PRIOR FILING DATE: 2001-02-13
PRIOR APPLICATION NUMBER: 60/276,703
PRIOR FILING DATE: 2001-03-16
PRIOR FILING DATE: 2001-03-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 547
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 300
LENGTH: 102
TYPE: PRT
                                                                                                                                                                                                                                                                                                                 GENERAL
                                                                                                                                                                                                                                                                                                                                  Sequence 831, Appropriate Publication No.
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Best Local Similarity
Matches 11; Conserv
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CURRENT FILING DATE: 2003-01-07
PRIOR APPLICATION UMBER: 60/268,221
PRIOR FILING DATE: 2001-02-12
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PRIOR FILING DATE: 2001-08-08
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PRIOR FILING DATE: 2001-04-02
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IITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 21402-269
APPLICANT
                                                                                                APPLICANT:
                                                          APPLICANT
                                                                                                                     APPLICANT:
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OTHER INFORMATION: Description of Artificial Sequence: Transforming
OTHER INFORMATION: growth factor beta like domain sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/322,127
                                                                                                                                                                                                                                                                                                                 INFORMATION:
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                           Gangolli, Esha
Padigaru, Muralidhara
Anderson, David W.
Rascelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
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Edinger, Shlomit
Gunther, Erik
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Peyman, John
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Shimkets, Richard
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Zerhusen, Bryan
Wolenc,
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b. US20040033493A1
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Adam R.
                    Steven D.
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Best Local
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SEQ ID NO 831
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                                                                                                      PPLICANT
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US-10-072-v..

J Sequence 833, Apr.

Bequence 833, Apr.

DELICANT INFORMATION:

APPLICANT: Tchernev, Velizar

POLICANT: Spycek, Kimberly

Terhusajan, Meera

Richar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Transforming, OTHER INFORMATION: growth factor-beta (TGF-beta) family US-10-072-012-831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
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CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed - See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
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PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
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ORGANISM: Artificial Sequence
FEATURE:
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TLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 55.0 es 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LDPGAVPKPCCVPTKLSPLS
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Rieger, Daniel K.
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Grosse, William M.
Alsobrook II, John P.
                                                                                                 Anderson, David W. Rastelli, Luca Miller, Charles E.
                                                                                                                                                                   Padigaru, Muralidhara
                                                                                                                                                                                             Gangolli, Esha
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5. US20040033493A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 72; DB 15; Pred. No. 0.048;
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Carol E. A

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SEQ ID NO 833
LENGTH: 102
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed - See File Wrapper or PALM
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                        equence 8, Application US/08260675 ublication No. US20030104993A1
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                                                                                                                                           APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES M
ITTLE OF INVENTION: MORPHOG
TITLE OF INVENTION: REPAIR
                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                      PPLICANT:
                                      STREET: 55 ST
CITY: BOSTON
STATE: MA
STATE: MA
COUNTRY: USA
ZIP: 02140
                                                                                                                             MBER OF SEQUENCES:
                                                                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                        57 LDPGAVPKPCCVPTKLSPLS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LING DATE: 2001-01-31
PLICATION NUMBER: 60/265,395
LING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                              INFORMATION:
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Rieger, Daniel K.
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OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                              ATION:
RUEGER, DAVID C
RUEGER, THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                         TESTA HURWITZ & THIBEAULT
                                                                       STATE STREET
                                                                                                            ADDRESS:
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                                                                                                                                                              CHARLES M : MORPHOGEN-INDUCED NERVE REGENERATION AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Catherine E
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64.9%; Score 72; DB 15;
55.0%; Pred. No. 0.048;
tive 5; Mismatches 4
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Sequence 8, Application US/09952318A
Publication No. US20030224979A1
GENERAL INFORMATION:
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
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                                                                                                                                                                                                                                                                                  JS-09-952-318A-8
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Best Local (
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                                                  PRIOR APPLICATION NUMBER: 08/432,883 PRIOR FILING DATE: 1995-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE:
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ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /label= MOP2-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US OFFILING DATE: 11-MAR-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IOR APPLICATION DATA: APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH: 139 amino acids YPE: amino acid acid acid amino acid single
              APPLICATION NUMBER: 08/115,914 FILING DATE: 1993-09-01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                      94 MKPDVVPKACCAPTKLSATS 113
                                                                                                                                                                                                                                                                                                                                                                                                                         12;
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CATION NUMBER: 07/923,780
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 8;
                                                                                                                                                                                              OF AND/OR INCREASE BONE MASS
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RESULT 191
US-10-050-050-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-952-318A-8
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                           TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: /note= "N
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ORGANISM: Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: - Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
PILING DATE: - Unknown>
APPLICATION NUMBER: US 08/445,882
PILING DATE: - 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMYUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/050,050

FILING DATE: 15-Jan-2002

OTACTITION HOLDS: 15-Jan-2002
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TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING
PROLIFERATION OF EPITHELIAL CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: COMEN, CHARLES M.
CHARETE, MARC F.
CHARETE, MARC F.
CHAREASAMPATH, THANGAVEL
RUEGER, DAVID C.
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CORRESPONDENCE ADDRESS:
                                       FEATURE
                                                                          MOLECULE TYPE: protein
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                                                                                                                                                                                                 LENGTH: 139 amino acids
TYPE: amino acid
                                                                                                                                                         STRANDEDNESS: single
NAME/KEY:
                                                                                                                      TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 01748
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Protein
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Pred. No. 0.065;
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SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-050-050-8
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(Sequence 27, Application US/08957425
; Sequence 27, Application US/08957425
; Publication No. US20030069401A1
; GENERAL INFORMATION:
; APPLICANT: OPPERMANN, HERMANN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Kuberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CBM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
PRIOR APPLICATION NUMBER: US/9/464,206
PRIOR APPLICATION NUMBER: US/9/464,206
PRIOR PILING DATE: 1999-12-15
PRIOR PILING DATE: 1995-03-01
NUMBER: 05/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER: DATE: 1995-03-01
NUMBER: DATE: 1995-03-01
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Best Local Similarity 60.0
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SEQ ID NO 8
LENGTH: 139
TYPE: PRT
ORGANISM: Murinae gen. sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8, Application US/10385064
Publication No. US20040102373A1
GENERAL INFORMATION:
APPLICANT: Cohen, Charles M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 64.9
Best Local Similarity 60.0
Matches 12; Conservative
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COUNTRY: U.S.A.
ZIP: 02109
COMPUTER READABLE FORM:
COMPUTER TAPABABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                       TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 MKPDVVPKACCAPTKLSATS 113
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                                                                                                                                        CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                               ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                           OPPEKUAN.,
OZKAYNAK, ENGIN
THANGAVEL
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RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                            ROY H.L.
                                                                                                                                                                                                  HURWITZ & THIBEAULT
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        Version #1.25
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                                                                                                                                          RESULT 194
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Best Local Similarity 60.0
Matches 12; Conservative
                                                                                             Sequence 23, Ap
Publication No.
                                                                                  GENERAL INFORMATION:
                                       APPLICANT:
APPLICANT:
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SEQUENCE CHARACTERISTICS:
APPLICANT:
                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
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                                                                                                                                                                                354 MKPDVVPKACCAPTKLSATS 373
                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                     LENGTH: 399 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: PITCHER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
                                                                                              Application US/08260675
No. US20030104993A1
            KUBERASAMPATH, THAN
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE:
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PLICATION NUMBER: US 315,342
PLICATION STATES 1989
PLICATION TO 322 630
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                                                                   RUEGER,
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LICATION NUMBER:
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CHARLES M
                                                                  DAVID C
                                                                                                                                                                                                                                                     64.9%;
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07-SEP-1990
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22-FEB-1991
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                                                      THANGAVEL
                                                                                                                                                                                                                                                     Score 72; DB 8
Pred. No. 0.18;
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Best Local Similarity
Matches 12; Conserv
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Sequence 23, Application US/09952318A
Publication No. US20030224979A1
GENERAL INFORMATION:
APPLICANT: Kubersampath et al.
FITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF TITLE OF INVENTION: METABOLIC BONE DISEASE FILE REFERENCE: JUL-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/170,936
PRIOR APPLICATION NUMBER: 08/135,914
PRIOR FILING DATE: 1995-05-06
PRIOR FILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
PILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US
APPLICATION NUMBER: US
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
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TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 399 amino acids TYPE: amino acid TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: TESTA HURWITZ & THIBEAULT STREET: 55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                 354 MKPDVVPKACCAPTKLSATS 373
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RATION NUMBER: 27,829
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
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Pred. No. 0.18
4; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          )B 8; Length 399;
18;
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RESULT 196
US-10-122-026-8
; Sequence 8, Application US/10122026
; Publication US20030105004A1
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Best Local Similarity
Matches 12; Conserv
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SEQ ID NO 23
LENGTH: 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR FILING DATE: 1991-08-30
PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATI
APPLICANT: J
                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING PARENTIN Release #1.0, Ve-
SOFTWARE: Patentin Release #1.0, Ve-
CURRENT APPLICATION DATA:
APPLICATION: AUMBER: US/10/122,026
FILING DATE: 29-AUM-2002
CLASSIFICATION: AUMKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Patent Administrator, Testa, Hurwitz
Thibeault, LLP
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 08/402,542
FILING DATE: 13-WAR-1995
APPLICATION NUMBER: US 08/840,510
FILING DATE: 31-WAR-1993
APPLICATION NUMBER: US 08/029,335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: BOSTON
APPLICATION NUMBER: US 07/752,857
FILLING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
FILLING DATE: 30-AUG-1991
                                                                               APPLICATION NUMBER: US 07/923,780 FILING DATE: 31-JUL-1992
                                                                                                                                              FILING DATE: 16-SEP-1992
APPLICATION NUMBER: US 07/938,336
                                                                                                                                                                                                           APPLICATION NUMBER: US 07/971,091 FILING DATE: 03-NOV-1992
                                                                                                                                                                                         APPLICATION NUMBER: US 07/946,235
                                                                                                                                                                                                                                                      FILING DATE: 04-MAR-1993
                                                                                                                            ILING DATE: 28-AUG-1992
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TUCKER, RONALD F
RUEGER, DAVID C
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
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Pred. No. 0.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Version #1.25
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; TOPOLOGY: linear; MOLECULE TYPE: protein; SEQUENCE DESCRIPTION: SEQ ID NO: 8: US-10-122-026-8
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US-10-050-050-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local Similarity
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                                                                                                                                                     NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
TELEPHAX: (508) 435-9001
TELEPHAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 23:
INFORMATION FOR SEQ ID NO: 23:
                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/050,050
FILING DATE: 15-0an-2002
CLASSIFICATION COMPANDER: US/08/461,113
APPLICATION NUMBER: US/08/461,113
APPLICATION NUMBER: US/08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 33

CORRESPONDENCE ADDRESS:
ADDRESSE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
CITY: HOPKINTON
STATE: MA.
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ATTORNEY/AGENT INFORMATION:
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COMPUTER READABLE FORM:
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                                                                                                                  SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 399 amino acids
LENGTH: 399 amino acids TYPE: amino acid TOPOLOGY: linear
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PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN B.
SMART, JOHN B.
SMART, JOHN B.
SNART, JOHN B.
S
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CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64.9%;
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Pred. No. 0.18;
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TOPOLOGY: Ilnear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-350-747-2
                                                                                                                             RESULT 199
US-10-321-799-27
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US-10-050-050-23
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US-10-350-747-2
Sequence 27, Application US/10321799
Publication No. US20030224996A1
PUBLICATION:
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/10350747
Publication No. US20030153072A1
GENERAL INFORMATION:
APPLICANT: Hogan, Brigid L.M.
TITLE OF INVENTION: Compositions and Methods of Making
                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 60.0
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 831-494
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/808,346
FILING DATE: 28-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Leary Ph.D., Kathryn
REGISTRATION NUMBER: 36,317
REFERENCE/DOCKET NUMBER: 9823-1
TELEPHONE: 215-567-2020
TELEPHONE: 215-567-2091
                                                                                                                                                                                                                                                                                                                                                                                                      Local
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PStentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                  354 MKPDVVPKACCAPTKLSATS 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             354 MKPDVVPKACCAPTKLSATS 373
                                                                                                                                                                                                                                                                                                        1 INPETVEKECCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                      L Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/10/350,747 FILING DATE: 24-Jan-2003 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Panitch Schwarze Jacobs & Nadel, P.C. STREET: 1601 Market Street, 36th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 399 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ITY: Philadelphia
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                                                                                                                                                                                                                                                                                                                                                                                                Score 72; DB 1
Pred. No. 0.18;
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Pred. No. 0.
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      INFORMATION FOR
                                                                                                                                                                                 APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-0CT-1989
ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
                                                                                       REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA
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ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 1-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
NN FOR SEQ ID NO: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
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APPLICATION NUMBER: US OF THE PROPERTY OF THE PROPERT
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FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
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APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
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FILING DATE: 23-FEB-19
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RUEGER, DAVID C.
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US-10-428-997A-27
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Best Local Similarity
Matches 12; Conserv
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APPLICATION NUMBER: US/10/428,997A
FILING DATE: 02-May-2003
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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MEDIUM TYPE: Floppy disk
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FILING DATE: 24-CCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
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                                  APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990 APPLICATION NUMBER: US 07/599,543
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH: 399 amino acids
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
                                                                                            FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
                                                                                                                                                  FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
                                                                                                                                                                                                        APPLICATION NUMBER: US 07/621,849 FILING DATE: 4-DEC-1990
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APPLICATION NUMBER: US 07/579,865
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FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
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125 HIGH STREET
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Pred. No. 0.18;
4; Mismatches 4
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Best Local Similarity
Thes 12; Conserve
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                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/422,613
APPLICATION NUMBER: US 07/422,623
APPLICATION NUMBER: US 07/422,623
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: BRIAN FAIRCHILD
REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STK-015C1
TELEPHONE: 617/248-7000
TELEPHONE: 617/248-7100
354 MKPDVVPKACCAPTKLSATS 373
                     1 INPETVPKPCCAPTQLNAIS 20 : |: || | | | | | | | |
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APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989
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                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                   LENGTH: 399 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 23-FEB-1989
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                                                                                      64.9%;
                                                                         4.
                                                                       Score 72; DB 1
Pred. No. 0.18;
4; Mismatches
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                                                                                                             DB 15;
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Search completed: October 26, 2004, 07:52:17 Job time : 50 secs

Gaps